340

<210> 3003

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3003

Met Glu Val Thr Arg Gln His Pro Arg His Pro Tyr Pro Lys Val Gly

5 10 1.

Ser Arg 11e Pro Ser Thr Arg Lys Cys His Ser Pro Pro Pro Pro Pro 20 25 30

Ser Gly Thr Leu Thr Gly Ala Glu Cys Gly Gly Gly Arg Gly Arg Glu
35 40 45

Arg Arg Gly Gly Gly Thr Arg His Thr His His Ala Glu Asn Cys Phe
50 55 60

Thr Ala Phe Leu Lys Val Phe Lys Met Gln Phe Leu Gln Pro Glu Asn 65 70 75 80

Ser His Pro Phe Thr Ser Pro Ser Pro His Pro Ala Pro His Pro His 85 90 95

Arg Gly Leu Arg Trp Ala Val Ser Pro Arg Arg Pro Arg Pro His Ala 100 105 110

Pro Arg Ala Ala Pro Gly Gly Gly Val Pro Asp Ala Ala Gln Leu 115 120 125

Gly Met Leu Arg Thr Cys Met 130 135

<210> 3004

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3004

Met Gly Ser Ser Met Glu His Met Arg Arg Glu Ser Gly Gly Gly

10 5 Gly Gly Gly Ala Ser Arg Gly Ala Ala Val Gly Trp Arg Lys Pro Gly 25 Gly Arg Val Gln Cys Arg Glu Ser Asn Glu Glu Arg Phe Glu Ala Cys 35 40 45 Gln Gln Asn Pro Met Leu Gln Arg Gly Leu Gly Met Gly Leu Leu Arg 55 60 Ala Leu Leu Thr Val Ser Pro Ser Arg Ala Ala Ser Gly Asp Cys Gly 70 75 65 80 Asp Cys Trp His Thr Ala Gly Phe Ala Arg Leu Lys Thr Met Gly Gly Val Glu Asp Leu Leu Thr His Leu Lys Lys Ile Gly Gly Lys Gly Arg 105 lle Glu Ser Val Ser Asp Arg Lys Arg lle lle Cys 115 120

<210> 3005

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3005

Met Pro Ala Asn Gly Glu Thr Val Thr Leu Pro Thr Ser Pro Ser Ile

1 5 10 15

Pro Val Gly Ile Ser Leu Gly Leu Leu Lys Arg Glu Met Ala Gln Gly
20 25 30

Leu Leu Pro Glu Ala Lys Lys Pro Arg Leu Leu His Gly Thr Leu 11e 35 40 45

Met Lys Asp Ser Val Ser Ala Arg Thr Val Ser Gly Gly Gly Arg Ala
50 55 60

Ala Ala Ala Leu Thr Asp Leu Ser Leu Pro His Arg Thr Ser Gly Trp
65 70 75 80

Cys Pro Gln Ser Lys Pro Ser Lys Ser Trp Val Trp Leu Ser Thr Ser 85 90 95

Cys Ala Ser Pro Ala Ala Cys Thr Cys Met Thr His Ala Arg Ser Arg

Arg Arg His Cys Ala Ser Thr Ala Thr Ser Arg Ala Ser
115 120 125

<210> 3006

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3006

Met His Asn Ala Glu His Tyr Ser Ser Val Tyr Ala Ser Ser Ser Cys

1 5 10 15

Ser Met Asp Ser Leu Ala Ser Ser Leu Asp Glu Gly Asp Thr Thr Ser 20 25 30

Leu Leu Lys Leu Gln Arg Tyr Asn Ser Tyr Asp lle Ser Arg Asp Thr
35 40 45

Leu Tyr Val Ser Lys Ser Ile Cys Leu Ile Thr Pro Leu Pro Phe Met 50 55 60

Gln Ala Cys Lys Lys Phe Leu Ile Gln Leu Tyr Lys Ala Val Thr Ser 65 70 75 80

Gln Gln Pro Pro Pro Leu Pro Leu Glu Ser Tyr Ile His Asn Ile Leu 85 90 95

Tyr Glu Val Pro Leu Pro Pro Pro Gly Arg Ser Leu Lys Phe Tyr Gly
100 105 110

Val Tyr Glu Pro Val 11e Cys Gln Arg Pro Gly Pro Ser Glu Leu Pro 115 120 125

Leu Ser Asp Tyr Pro Leu Arg Glu Ala Phe Glu Leu Leu Gly Leu Glu 130 135 140

Asn Leu Val Gln Val Phe Thr Cys Val Leu Leu Glu Met Gln 11e Leu 145 150 155 160

Leu Tyr Ser Gln Asp Tyr Gln Arg Leu Met Thr Val Ala Glu Gly 11e 165 170 175

Thr Thr Leu Leu Phe Pro Phe Gln Trp Gln His Val Tyr Val Pro lle 180 185 190

Leu Pro Ala Ser Leu Leu His Phe Leu Asp Ala Pro Val Pro Tyr Leu

Met Gly Leu Gln Ser Lys Glu Gly Thr Asp Arg Ser Lys Leu Glu Leu Pro Gln Gly Ala Asn Leu Cys Phe Val Asp Ile Asp Asn His Phe Ile Glu Leu Pro Glu Glu Phe Pro Gln Phe Pro Asn Lys Val Asp Phe Ile Gln Glu Leu Ser Glu Val Leu Val Gln Phe Gly Ile Pro Pro Glu Gly Ser Leu His Cys Ser Glu Ser Thr Ser Lys Leu Lys Asn Met Val Leu Lys Asp Leu Val Asn Asp Lys Lys Asn Gly Asn Val Cys Thr Asn Asn lle Ser Met Tyr Glu Leu Leu <210> 3007 <211> 250 <212> PRT <213> Homo sapiens <400> 3007 Met Gly Gln Gly Thr Gly Lys Leu Pro Pro Pro His Leu Ile Ser Asp Leu Pro Pro Gln Cys Pro Met Cys Asp Pro Ala Ile Phe Ser Lys Leu Asn Ser Val Thr Arg Ala Thr Gly Leu Ala Pro Ser Pro Ser Lys Asp Ser Glu Gly Ala Ser Phe Ser His Leu Leu lle lle Pho His Phe Ser Arg Gln Pro Thr Gln Lys Ala Trp Thr Arg Trp Trp Arg Cys Trp Gly Ser Tyr Thr Glu Ala Leu Phe Ser Val Cys Ser Leu Pro Gly Gln Ile

Arg Lys Leu Arg His Arg Lys Val Thr Gln Asp Tyr Arg Gly Gln His

			100					105					110		
Arg	Glu	Gln	Trp	Asn	Leu	His	Leu	Thr	Pro	Gly	Arg	Arg	Asn	Leu	His
		115					120					125			
Asp	His	Ser	Thr	Pro	Pro	Gln	Gly	Thr	Gly	Arg	Glu	Asn	Asn	Gly	Ser
	130					135					140				
Ser	Arg	Thr	Lys	Val	Thr	Phe	Pro	Arg	Val	Ser	Cys	Cys	Leu	Asp	Leu
145					150					155					160
Ala	Ala	Val	Ser	Val	Leu	Pro	Arg	Arg	Gly	lle	Ser	Met	Ser	Ser	Gly
				165					170					175	
Gln	Trp	Gln	Arg	Gly	Arg	Gly	Ala	Pro	Leu	Gln	Cys	Ala	Gly	Trp	Ser
			180					185					190		
Ala	Gly	Ser	Cys	Gln	Cys	Glu	Asp	Leu	Gln	Gln	Leu	Val	Tyr	Pro	Trp
		195					200					205			
Ser	Cys	His	Gln	Leu	Pro	Glu	Phe	Gly	Ala	Ala	Gly	Ala	Thr	Leu	Val
	210					215					220				
Val	Leu	Pro	Cys	Arg	Gly	Ser	Ser	Cys	Leu	Leu	Val	Ser	Glu	Ser	Gln
225					230					235					240
Leu	Trp	Gly	Cys	Asn	Leu	Lys	Pro	Lys	Ala						
				245					250						

<210> 3008

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3008

Ser Trp Val His His Gly Trp Arg Ala Cys Gly Trp Val Ala Leu Ala $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Gly Ile Leu Arg Ala Cys Arg Leu Pro Ser Ala Leu Gln Pro Ser Pro 35 40 45

Ala Pro Leu Phe Phe Lys Gly Val Leu Leu Gly Glu Pro Val Arg 50 55 60

Trp Glu Thr Ser Leu Gln Leu 11e Met Asp Val Leu Leu Ser Asn Gly

Ser Pro Gly Ala Gly Leu Ala Thr Pro Pro Tyr Pro His Leu Pro Val Leu Ala Ser Asn Met Asp Leu Leu Trp Met Ala Glu Ala Lys Met Pro Arg Phe Gly His Gly Thr Phe Leu Leu Cys Leu Glu Thr 11e Tyr Gln Lys Val Thr Gly Lys Glu Leu Arg Tyr Glu Gly Leu Met Gly Lys Pro Ser Ile Leu Thr Tyr Gln Tyr Ala Glu Asp Leu Ile Arg Arg Gln Ala Glu Arg Arg Gly Trp Ala Ala Pro Ile Arg Lys Leu Tyr Ala Val Gly Asp Asn Pro Met Ser Asp Val Tyr Gly Ala Asn Leu Phe His Gln Tyr Leu Gln Lys Ala Thr His Asp Gly Ala Pro Glu Leu Gly Ala Gly Gly Thr Arg Gln Gln Gln Pro Ser Ala Ser Gln Ser Cys Ile Ser Ile Leu Val Cys Thr Gly Val Tyr Asn Pro Arg Asn Pro Gln Ser Thr Glu Pro Val Leu Gly Gly Gly Glu Pro Pro Phe His Gly His Arg Asp Leu Cys Phe Ser Pro Gly Leu Met Glu Ala Ser His Val Val Asn Asp Val Asn Glu Ala Val Gln Leu Val Phe Arg Lys Glu Gly Trp Ala Leu Glu

<210> 3009

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3009

Met His Ser Gln Gly Lys Phe Leu Val Phe Phe Ser Gly Phe Lys Leu

Ala Ala Leu Val Ser Cys Leu His Met Cys Val Cys Leu Phe Leu Phe Ser Phe Cys Ser Phe Ser Phe Leu Val Trp Arg Phe Ser Asn Thr Asn Lys Cys Arg Glu Asn Ile Ala Met Asn Ser Met Tyr Ser Ser Pro Asp Phe Ser Asn His Gln Leu Tyr Ala Asn Leu Val Ser Ser Ile Thr Ser Leu Pro Leu Phe Cys Gly Ser Ile Leu Lys Gln Asn Pro Asn Ile Ile Thr Phe His Leu Gly Val Pro Gln His Phe Pro Leu Thr Asp Glu Asp Phe Lys Met <210> 3010 <211> 528 <212> PRT <213> Homo sapiens <400> 3010 Met Gly Asp Ala Pro Ser Pro Glu Glu Lys Leu His Leu Ile Thr Arg Asn Leu Gln Glu Val Leu Gly Glu Glu Lys Leu Lys Glu lle Leu Lys Glu Arg Glu Leu Lys Ile Tyr Trp Gly Thr Ala Thr Thr Gly Lys Pro His Val Ala Tyr Phe Val Pro Met Ser Lys Ile Ala Asp Phe Leu Lys Ala Gly Cys Glu Val Thr Ile Leu Phe Ala Asp Leu His Ala Tyr Leu Asp Asn Met Lys Ala Pro Trp Glu Leu Leu Glu Leu Arg Val Ser Tyr

Tyr Glu Asn Val Ile Lys Ala Met Leu Glu Ser Ile Gly Val Pro Leu

			100					105					110		
Glu	Lys	Leu	Lys	Phe	Ile	Lys	Gly	Thr	Лsp	Tyr	Gln	Leu	Ser	Lys	Glu
		115					120					125			
Tyr	Thr	Leu	Asp	Val	Tyr	Arg	Leu	Ser	Ser	Val	Val	Thr	Gln	His	Asp
	130					135					140				
Ser	Lys	Lys	Ala	Gly	Ala	Glu	Val	Val	Lys	Gln	Val	Glu	His	Pro	Leu
145					150					155					160
Leu	Ser	Gly	Leu	Leu	Tyr	Pro	Gly	Leu	Gln	Ala	Leu	Asp	Glu	Glu	Tyr
				165					170					175	
Leu	Lys	Val	Asp	Ala	Gln	Phe	Gly	Gly	Ile	Asp	Gln	Arg	Lys	Ile	Phe
			180					185					190		
Thr	Phe	Ala	Glu	Lys	Tyr	Leu	Pro	Ala	Leu	Gly	Tyr	Ser	Lys	Arg	Val
		195					200					205			
His	Leu	Met	Asn	Pro	Met	Val	Pro	Gly	Leu	Thr	Gly	Ser	Lys	Met	Ser
	210					215		•			220				
Ser	Ser	Glu	Glu	Glu	Ser	Lys	lle	Asp	Leu	Leu	Asp	Arg	Lys	Glu	Asp
225					230					235					240
Val	Lys	Lys	Lys	Leu	Lys	Lys	Ala	Phe	Cys	Glu	Pro	Gly	Asn	Val	Glu
				245					250					255	
Asn	Asn	Gly	Val	Leu	Ser	Phe	lle	Lys	His	Val	Leu	Phe	Pro	Leu	Lys
			260					265					270		
Ser	Glu	Phe	Val	lle	Leu	Arg	Asp	Glu	Lys	Trp	Gly	Gly	Asn	Lys	Thr
		275					280					285			
Tyr	Thr	Ala	Tyr	Val	Asp	Leu	Glu	Lys	Asp	Phe	Ala	Ala	Glu	Va]	Val
	290					295					300				
His	Pro	Gly	Asp	Leu	Lys	Asn	Ser	Val	Glu	Val	Ala	Leu	Asn	Lys	Leu
305					310					315					320
Leu	Asp	Pro	He		Glu	Lys	Phe	Asn		Pro	Ala	Leu	Lys		Leu
				325					330					335	
Ala	Ser	Ala		Tyr	Pro	Asp	Pro		Lys	Gln	Lys	Pro		Ala	Lys
			340					345				_	350		
Gly	Pro		Lys	Asn	Ser	Glu		Glu	Glu	Va]	He		Ser	Arg	Leu
		355					360					365			
Λsp		Arg	Val	Gly	Lys	lle	He	Thr	Val	Glu		His	Pro	Asp	Ala
Α.	370	ı	т	v, ·	C1	375	T 1	۸	17 7	C1	380	۸ 1	C1	D	Δ.
acn	Ser	1 (2)1	1 1/2	val	1 . 1 1 1	IVC	110	ASD	val	La LW	11111	A 1 2	11111	rro	ATO

390 395 400 Thr Val Val Ser Gly Leu Val Gln Phe Val Pro Lys Glu Glu Leu Gln 405 410 Asp Arg Leu Val Val Leu Cys Asn Leu Lys Pro Gln Lys Met Arg 420 425 430 Gly Val Glu Ser Gln Gly Met Leu Leu Cys Ala Ser Ile Glu Gly Ile 440 Asn Arg Gln Val Glu Pro Leu Asp Pro Pro Ala Gly Ser Ala Pro Gly 450 455 460 Glu His Val Phe Val Lys Gly Tyr Glu Lys Gly Gln Pro Asp Glu Glu 470 475 480 Leu Lys Pro Lys Lys Lys Val Phe Glu Lys Leu Gln Ala Asp Phe Lys 485 490 lle Ser Glu Glu Cys lle Ala Gln Trp Lys Gln Thr Asn Phe Met Thr 500 505 510 Lys Leu Gly Ser lle Ser Cys Lys Ser Leu Lys Gly Gly Asn Ile Ser 515 520 525

<210> 3011

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3011

 Met
 Pro
 Leu
 Thr
 Gly
 Thr
 Asn
 His
 Asp
 Arg
 Gln
 Gly
 His
 Leu
 Leu
 Arg

 1
 5
 10
 15

 Ser
 Gly
 Thr
 Thr
 Tyr
 Leu
 Leu
 Ala
 Met
 Gly
 Ala
 Asn
 Phe
 Thr
 Val

 20
 25
 30
 30
 Ne
 Phe
 Leu
 Leu
 Leu
 His
 His
 Leu
 Leu
 His
 His

His Pro 11e Leu Pro Ser Leu Pro Phe Asn Leu Pro 11e Leu Phe Phe 65 70 75 80

Pro Leu Lys Ser His Met Ile Leu Gln Ser Ser Phe Val Phe Pro Lys

<210> 3012

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3012

Met Trp Gly Arg Ser Ser Gly Glu Gly Gln Ser Leu Leu Pro Val Glu
1 5 10 15

Arg Lys Trp Ala Leu Glu Lys Leu His Glu Ser Ser Pro Ala Glu Gly
20 25 30

Pro Glu Val His Ile Ser Gly Ala Arg Val Gly Leu Met Val Thr Leu 35 40 45

Ala Gly Asp Ala Lys Ser Thr Gly Val Arg Pro Gly Gln Val Leu Val
50 55 60

Cys Glu Trp Ala Ser Phe Ser Arg Leu Ala His Arg Lys Arg Val Ala 65 70 75 80

Trp Leu Ala Phe Pro Leu Lys Leu Arg Thr Glu Ala Gln Asp Met Ser 85 90 95

His Thr 11e Asp Met Ser Trp Gly Gln Met Gly Gly Arg Cys Ala Gln
100 105 110

Ser Gly Cys 11e Asp Thr 115

<210> 3013

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3013

Met Gly Gly Pro Gly Gln Arg Gly Thr Gln Gln Arg Cys Pro Pro Ser

Ser Leu Ser Ser Leu Ala Gly Ile Thr Gly Pro Ser Ala Glu Pro Thr Pro Arg Thr Cys Ser Gly Cys Ala Lys Arg Pro Ala Thr Trp Cys Ala Thr Val Arg Pro Ala Arg Met Thr Ser Pro Ser Pro Ser Ser Glu Trp Gly Gln Leu Trp Phe Gln Gly Gln Gln Ala Gly Trp Lys Gly Thr Pro Val Phe Pro Leu Cys Pro Thr Lys Leu Gly Arg Ser Pro Ser Pro Met Asn Asn Pro Gln Ala Leu Gly Val Leu Arg Cys Leu Arg Leu Ser Pro Cys Ser Gln Gly Ala Gln Ser Pro Leu Gly Glu Ile Val Asp Pro Gln His Pro Ala Gln Lys Gly Ser Val Leu Val Val Trp Pro Gly Pro Leu Asn Leu Ser Arg Pro Gln Phe Pro Tyr <210> 3014 <211> 329 <212> PRT <213> Homo sapiens <400> 3014 Met Lys Phe Ser Ser Cys Leu Asn Arg Gly Ala Lys Pro Asp Glu Ile Asn Gly Arg Lys Lys Met Pro Ala lle Leu Phe Gln Glu Arg His Gly Leu Lys Gly Glu Arg Thr Thr Val Thr Arg Gly Arg Phe Arg Pro His Arg Ala Ala Arg Ala Gly Lys Leu Cys Arg Gly Arg Phe Arg Gly Gln

Ser	Gln	Gly	Gly	Gly	Pro	Arg	His	Arg	Arg	Val	Phe	Gln	Ala	Gly	Pro
65					70					75					80
Gly	Pro	Gly	Gln	Arg	Gly	He	Thr	Arg	Pro	Val	Leu	Cys	Ser	G1n	Asp
				85					90					95	
Glu	Gly	Arg	Gly	Gln	Thr	Phe	Ser	Pro	Arg	Pro	Ser	Arg	Gln	Gly	Trp
			100					105					110		
Ala	Val	Pro	Val	Gly	Ala	Trp	Glu	Arg	Arg	Arg	Arg	Ala	His	Phe	Gln
		115					120					125			
His	Gln	Val	Arg	Glu	Gly	His	Asp	Ala	Gln	Pro	Leu	Glu	Pro	Leu	Ala
	130					135					140				
Cys	Val	Pro	His	Pro	Asp	Phe	Leu	Ala	Ser	Gly	Glu	Arg	Pro	Leu	Arg
145					150					155					160
Arg	Val	Gly	Val	Ala	Arg	Gly	Ser	Ala	Glu	Glu	Ser	Trp	Gly	Gln	Λrg
				165					170					175	
Ala	Trp	Trp	Arg	Gly	Pro	Ala	Arg	Arg	Val	Pro	Gly	Ala	Arg	Gly	Arg
			180					185					190		
Pro	Gln	Asn	Pro	Gly	Arg	Val	Glu	Ala	Pro	Gly	His	Ala	Pro	Gly	Trp
		195					200					205			
Trp	Ala	Ala	Arg	Asp	Gly	Ser	Gly	Asp	Pro	Ser	Pro	Glu	Glu	Gly	Arg
	210					215					220				
Gly	Leu	His	Arg	Gly	Gln	Ala	Glu	Ala	Pro	Arg	Val	Pro	Cys	Gly	Phe
225					230					235					240
Arg	Pro	Ser	Pro	Leu	Ala	Pro	Thr	Pro	Arg	Ser	Gly	Arg	Asp	Ser	Ser
				245					250					255	
Pro	Gly	Ser	Ala	Gly	Gln	Ala	Gln	Val	Cys	Ala	Leu	Arg	Leu	Gln	Pro
			260					265					270		
Arg	Gln	Lys	Ser	Val	Pro	Arg	Arg	Gly	Arg	Arg	Val	Arg	Val	Pro	Arg
		275					280					285			
Met	Arg	Val	Gly	Leu	Pro	Pro	Ala	Gly	Thr	Ala	Glu	Leu	Arg	Arg	Gly
	290					295					300				
Ser	Arg	Cys	Ser	Arg	Ser	Ala	Ser	Gly	Arg	Gly	Arg	Leu	Ser	Ala	Leu
305					310					315					320
Gly	Gly	Glu	Ala	G1 y	G1 y	Pro	Leu	Gly							
				325											

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<210> 3015
<211> 169
<212> PRT
<213> Homo sapiens
<400> 3015
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Met Gly Ser Ser Lys Gly Leu Trp Lys Glu Lys Pro Ser Ala His Thr 10 Ser Glu Cys Phe Ser Thr Thr Ala Cys Pro Val Ala Cys Ile Leu Leu 20 25 30 Val Trp Asn Ser Gln Thr Pro Ala Gly Leu Gln Ser Leu Cys Thr Gly 40 Arg His Pro Ser Leu Ser Ala Arg Ala Gln Trp Ala Gly Pro Arg Ala 50 55 Ser Arg Glu Glu Gly Thr Phe Trp Thr Glu Pro Val Gly Gln Glu Arg

75

Arg Leu Ile Arg Ser Gly Ser Ser Gln Asn Glu Ser Gln Glu Asp Gln 90

Gly Ala Asp Leu Ile Ser His Glu Gly Leu Lys Ala Asp Asn Arg Arg 100 105 110

Glu Ser Ser Thr Trp Ala Asn Glu Val Glu Asp Arg Arg Pro Gln Cys 120

Thr Ser Ala Leu Asn Leu Thr Pro Ser His Leu His Pro Pro His Pro 130 135 140

Leu Thr Thr Phe Phe Arg Asn Val Ile Gly Ile Lys Ile Pro Pro Gly 150 155 160

Leu Val Ala Met Gly Gly Thr Val Ala

165

<210> 3016

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3016

Met Arg Gly Ala Ala Gly Ala Ala Gly Ala Ser Ser Arg Glu Asp Gly 10 Cys Arg Val Pro Arg Pro Pro Pro Thr Pro Gly Gly Val Pro Ser Ser 20 25 Gln Leu Arg Pro Glu Arg Leu Leu Pro Gly Glu Ser Pro Pro Leu Cys 40 Asn Gln Pro Ala Ala Ala Glu Gly Ala Trp Val Pro Ser Ala Glu Pro 55 60 Ala Ala His Gly Arg Arg Arg Thr Val Pro Trp Trp Arg Ser Ala Pro 70 75 80 65 Ala Thr Arg Leu Ala Thr Pro Gly Arg Gly Pro Gly Gly Arg Gly Trp 90 85 Asp Leu Gly Ala Leu Arg Val Gly Pro Trp Gly Met Arg Leu Gly Pro 100 105 110 Ala Gly Asn Arg Ala Gly Ala Arg Arg Leu Ala Gly Leu Pro Ala Thr 120 125 115 Glu Cys Phe Asp Ala Phe Phe Asn Ser Ala Asn Val Ser Leu Ser Thr 135 140 Leu Ser Pro Ser Ser Ala Gln Arg Thr Val Leu 145 150 155

<210> 3017

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3017

Met Lys Val Thr Gly Thr Pro Pro Ala Glu Phe Val Gln Arg Leu Gln

1 5 10 15

Ser Asp Glu Ala Lys Asn Tyr Met Lys Gly Leu Pro Glu Leu Glu Lys
20 25 30

Lys Asp Phe Ala Ser Ile Leu Thr Asn Ala Ser Pro Leu Ala Val Asn 35 40 45

Leu Leu Glu Lys Met Leu Val Leu Asp Ala Glu Gln Arg Val Thr Ala 50 55 60

<210> 3018

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3018

130

Met Leu Ala Arg Arg Asp Leu Gly Leu Val Pro His Gly Val Ser Gly l 5 10 15 Val Ser Ile Ala Ala Ser Ser Thr Pro Gln Gly Gln Ala Val Cys Ser 25 Pro Ser Val Ala Ala Pro Ser Thr Leu Leu Leu Leu Arg Thr His Leu 35 40 45 Leu Gly Ala Ala Ser Leu Gln Gly Cys Gly Val Leu His 11e Leu Pro 55 lle Phe Leu Phe Ser Lys Gly Cys Arg Arg Asp Ala Gln Cys Ala Cys 70 75 Thr Val Gly Pro Ser Ala Ser Pro Arg Ser Gly Arg Gly Pro Gly Arg 85 90 95 Gly Gly Gly Arg Arg Pro Arg Leu Gly Ala Ala Arg Ser Gly Cys Pro 105 Gly Ala Ala Ala Gly Gly Pro Ala Val Leu His Pro Trp Arg Arg 115 120 125 Ala Gly Gly Arg Val Arg Gly Ala Ser Pro Pro Gln Gly Pro Gln Thr

140

Ala Arg Gly Phe Pro Leu Pro Ser Arg Trp Ser Ser Ser Pro Ile Pro 150 155 Gly Cys Ile Ser Ile Tyr Pro Ser Pro Ile Ser Phe Ala His Pro Gly 165 170 Ser Leu Ala Pro Leu Gly Ser Pro Phe Pro Ser Pro Gly Pro Pro Ser 185 Arg Ser Arg Leu Leu Cys Pro Gly Leu Arg Arg Gly Leu Thr Pro Gly 200 Arg Trp Phe Arg Pro Asp Leu Gly Ser Leu Val Thr Pro Arg Leu Leu 210 215 220 Pro Leu Pro Asn Ser Gly Glu Pro Gly Ile Lys Pro Cys Ala Phe Leu 230 235 Phe Phe Leu Leu Arg Ala Glu Ser Thr Leu His Val Cys Gln Gly Ile 245 250 Ser Ser Glu Ser Glu Arg Arg Thr Arg Ser Phe Phe Phe Pro Arg 260 265 270 Ser Cys Leu Leu 275

<210> 3019

<211> 520

<212> PRT

<213> Homo sapiens

<400> 3019

65					70					75					80
Tyr	Leu	Pro	His	His	Pro	Lys	Pro	Glu	Trp	Ala	Glu	Tyr	Cys	Leu	Val
				85					90					95	
Ser	Pro	Gly	Glu	Asp	Gly	Leu	Ser	Asp	Pro	Ala	Glu	Met	Thr	Ser	Asp
			100					105					110		
Glu	Cys	Gln	Pro	Ala	Glu	Ala	Pro	Leu	Gly	Asp	lle	Gly	Ser	Asn	His
		115					120					125			
Arg	Asp	Pro	His	Pro	Ile	Trp	Gly	Lys	Asp	Arg	Ser	Trp	Thr	Gly	Gln
	130					135					140				
Glu	Leu	Ser	Pro	Leu	Ala	Gly	Glu	Asp	Arg	Glu	Lys	Gly	Ser	Thr	Gly
145					150					155					160
Ala	Arg	Lys	Glu	Glu	Glu	Gly	Gly	Pro	Val	Leu	Val	Lys	Glu	Lys	Leu
				165					170					175	
Gly	Leu	Lys	Lys	Leu	Val	Leu	Thr	Gln	Glu	Gln	Lys	Thr	Met	Leu	Leu
			180					185					190		
Asp	Trp	Asn	Asp	Ser	lle	Pro	Glu	Ser	Val	His	Leu	Lys	Ala	Gly	Glu
		195					200					205			
Arg		Ser	Gln	Lys	Ser		Glu	Asn	Gly	Arg	Gly	Gly	Arg	Val	Leu
	210					215					220				
	Pro	Val	Arg	Pro		Leu	Leu	Pro	Arg		Ala	Gly	Glu	Pro	
225					230					235					240
Pro	Thr	GIn	Arg	Gly	Ala	GIn	Glu	Lys		Gly	Thr	Pro	Ala		GIn
. 1	C 1	C1	C 1	245		37 2	13	D	250 D	,	C	n		255	
Ala	GIn	GIY		Arg	Asn	vai	Pro		Pro	Lys	Ser	Pro		Arg	Leu
11.	Λlο	Aan	260	11.	A 22.07	A 30.00	Com	265	C1	Due	1	1	270	A = 12	C a se
116	мта	275	мта	11e	Arg	AI g	280	Leu	GIU	110	Leu	285	261.	ASII	ser
Clu	Clv		Lve	Lys	Ala	Tun		lve	Cln	Clu	Sor		The	Lou	Dro
Ulu	290	Oly	Lys	Lys	лта	295	мла	Lys	OIII	Olu	300	LyS	1111	Leu	110
Thr		Ala	Cvs	Thr	Arg		Phe	Glv	Leu	Arg		Thr	Aen	Ser	Aen
305	0111	Mid	0,5		310	561	THE	O13	LCu	315	Ly.5	1111	Hall	501	320
	Asp	Glv	Asp	Gln		Ser	Pro	Glv	Arø		Gln	Ser	Ser	Ala	
~		~		325		~		~ 4 3	330		~ 4 11			335	
Ser	Pro	Pro	Asp	Pro	Ala	Leu	Arg	Thr		Ser	Leu	Pro	Asn		Pro
			340					345					350		

Ser Lys Val Phe Pro Ala Leu Arg Ser Pro Pro Cys Ser Lys Ile Glu 360 Asp Val Pro Thr Leu Leu Glu Lys Val Ser Leu Gln Glu Asn Phe Pro 370 375 380 Asp Ala Ser Lys Pro Pro Lys Lys Arg Ile Ser Leu Phe Ser Ser Leu 390 395 Arg Leu Lys Asp Lys Ser Phe Glu Ser Phe Leu Gln Glu Ser Arg Gln 405 410 Arg Lys Asp Ile Arg Asp Leu Phe Gly Ser Pro Lys Arg Lys Val Leu 425 430 Pro Glu Asp Ser Ala Gln Ala Leu Glu Lys Leu Leu Gln Pro Phe Lys 440 Ser Thr Ser Leu Arg Gln Ala Ala Pro Pro Pro Pro Pro Pro Pro 450 455 460 Pro Pro Pro Pro Pro Pro Thr Ala Gly Gly Ala Asp Ser Lys Asn 470 475 480 Phe Pro Leu Arg Ala Gln Val Thr Glu Ala Ser Ser Ser Ala Ser Ser 490 Thr Ser Ser Ser Ser Ala Asp Glu Glu Phe Asp Pro Gln Leu Ser Leu 500 505 510 Gln Leu Lys Glu Lys Lys Thr Leu 515 520

<210> 3020

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3020

 Met Gly Pro Glu Gly Ala Leu Cys Val Tyr Val Gly Gly Gly Gly Ala

 1
 5
 10
 15

 Val Leu Ala Ala Ser Val Leu Cys Val Thr Leu Pro Ser Lys Gly Pro
 20
 25
 30

 Val Leu Ser Val Pro Arg Glu Pro Gln Pro Lys Leu Arg Arg Glu Gly
 35
 40
 45

<210> 3021

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3021

Met Leu Glu Phe Gln Glu Leu Met Thr Val Phe Gln Leu Leu His Trp

1 5 10 15

Asn Gly Ser Leu Lys Ala Met Arg Glu Arg Gln Cys Ser Arg Gln Glu

20 25 30

Val Leu Ala His Tyr Ser His Arg Ala Leu Asp Asp Asp Ile Arg His 35 40 45

Gln Met Ala Leu Asp Trp Val Ser Arg Glu Gln Ser Val Pro Gly Ala 50 55 60

Leu Ser Arg Glu Leu Ala Ser Thr Glu Arg Glu Leu Asp Glu Ala Arg
65 70 75 80

Leu Ala Gly Lys Glu Leu Arg Phe His Lys Glu Lys Lys Asp He Leu 85 90 95

Val Leu Ala Ala Gly Gln Leu Gly Asn Met His Ser Ser Asn Cys 100 105 110

<210> 3022

<211> 723

<212> PRT

<213> Homo sapiens

<400)> 30)22													
Met	Ala	Glu	Glu	Glu	Gly	Pro	Pro	Val	Glu	Leu	Arg	Gln	Arg	Lys	Lys
1				5					10					15	
Pro	Lys	Ser	Ser	Glu	Asn	Lys	Glu	Ser	Ala	Lys	Glu	Glu	Lys	He	Sei
			20					25					30		
Asp	Ile	Pro	lle	Pro	Glu	Arg	Ala	Pro	Lys	His	Val	Leu	Phe	Gln	Are
		35					40					45			
Phe	Ala	Lys	He	Phe	Ile	Gly	Cys	Leu	Ala	Ala	Val	Thr	Ser	Gly	Met
	50					55					60				
Met	Tyr	Ala	Leu	Tyr	Leu	Ser	Ala	Tyr	His	Glu	Arg	Lys	Phe	Trp	Phe
65					70					75					80
Ser	Asn	Arg	Gln	Glu	Leu	Glu	Arg	Glu	11e	Thr	Phe	Gln	Gly	Asp	Sei
				85					90					95	
Ala	Ile	Tyr	Tyr	Ser	Tyr	Tyr	Lys	Asp	Met	Leu	Lys	Ala	Pro	Ser	Phe
			100					105					110		
Glu	Arg	Gly	Val	Tyr	Glu	Leu	Thr	His	Asn	Asn	Lys	Thr	Val	Ser	Leu
		115					120					125			
Lys	Thr	Ile	Asn	Ala	Val	Gln	Gln	Met	Ser	Leu	Tyr	Pro	Glu	Leu	116
	130					135					140				
Ala	Ser	lle	Leu	Tyr	Gln	Ala	Thr	Gly	Ser	Asn	Glu	He	11e	Glu	Pro
145					150					155					160
Val	Tyr	Phe	Tyr	He	Gly	He	Val	Phe	Gly	Leu	Gln	Gly	He	Tyr	Va]
				165					170					175	
Thr	Ala	Leu	Phe	Val	Thr	Ser	Trp	Leu	Met	Ser	Gly	Thr	Trp	Leu	Ala
			180					185					190		
Gly	Met		Thr	Val	Ala	Trp		Val	He	Asn	Arg		Asp	Thr	Thi
		195					200					205			
Arg		Glu	Tyr	Ser	lle		Leu	Arg	Glu	Asn		Ala	Leu	Pro	Tyn
	210					215					220				
	Ala	Cys	Gln	He		Ala	Leu	Thr	G1 y		Leu	Lys	Ser	Aşn	
225	T)	Tr.	6.1	6.1	230	DI		Tr.	,	235		C		C	240
Asn	Ihr	lyr	Gly		Arg	Phe	Cys	lyr		Leu	Met	2er	Ala		lhi
T	TI	DI.	M ·	245	14	T	C1	T	250		т		,	255	,
lyr	Ihr	Phe		Met	Met	Erp	Glu		5er	His	lyr	Leu	Leu	Phe	Let
			260					265					270		

Gln	Ala	He	Ser	Leu	Phe	Leu	Leu	Asp	Thr	Phe	Ser	Val	Glu	Gln	Ser
		275					280					285			
Asp	Lys	Val	Tyr	Glu	Val	Tyr	Lys	He	Tyr	Пе	Phe	Ser	Leu	Phe	Leu
	290					295					300				
Gly	Tyr	Leu	Leu	Gln	Phe	G]u	Asn	Pro	Ala	Leu	Leu	Val	Ser	Pro	Leu
305					310					315					320
Leu	Ser	Leu	Val	Ala	Ala	Leu	Met	Leu	Ala	Lys	Cys	Leu	Gln	Leu	Asn
				325					330					335	
Val	Lys	Lys	Gly	Ser	Phe	Val	Ala	Lys	He	He	Lys	Val	lle	Asn	Phe
			340					345					350		
Tyr	Leu	Val	Cys	Thr	Leu	Thr	Ile	Thr	Leu	Asn	He	He	Met	Lys	Met
		355					360					365			
Phe	Val	Pro	His	Lys	Glu	Asn	Gly	His	Met	Leu	Lys	Phe	Leu	Glu	Val
	370					375					380				
Lys	Phe	G1 y	Leu	Asn	Met	Thr	Lys	Asn	Phe	Thr	Met	Asn	Trp	Leu	Leu
385					390					395					400
Cys	Gln	Glu	Ser	Leu	Gln	Ala	Pro	Ser	Gln	Asp	Phe	Phe	Leu	Arg	Leu
				405					410					415	
Thr	Gln	Ser	Ser	Leu	Leu	Pro	Phe	Tyr	lle	Leu	Val	Leu	lle	Ile	Cys
			420					425					430		
Phe	Leu	Ser	Met	Leu	Gln	Val	lle	Phe	Arg	Arg	He	Asn	Gly	Lys	Ser
		435					440					445			
Leu	Lys	Glu	Thr	Val	Thr	Leu	Glu	Asp	G1y	Arg	He	Gly	Glu	Arg	Pro
	450					455					460				
Glu	Ile	He	Tyr	His	Val	lle	His	Thr	He	Leu	Leu	Gly	Ser	Leu	Ala
465					470					475					480
Met	Val	lle	Glu	G1 y	Leu	Lys	Tyr	He	Trp	11e	Pro	Tyr	Val	Cys	Met
				485					490					495	
Leu	Ala	Ala	Phe	Gly	Val	Cys	Ser	Pro	Glu	Leu	Trp	Met	Thr	Leu	Phe
			500					505					510		
Lys	Trp	Leu	Arg	Leu	Arg	Thr	Val	His	Pro	Пе	Leu	Leu	Ala	Leu	He
		515					520					525			
Leu	Ser	Met	Ala	Val	Pro	Thr	lle	lle	Gly	Leu	Ser	Leu	Trp	Lys	Glu
	530					535					540				
Pho	Pho	Pro	Ara	يرم ا	Mot	Thr	Glu	Lau	Mot	Glu	Lau	Gln	G1n	Pho	Tur

Asp Pro Asp Thr Val Glu Leu Met Thr Trp 11e Lys Arg Gln Ala Pro Val Ala Ala Val Phe Ala Gly Ser Pro Gln Leu Met Gly Ala Ile Lys Leu Cys Thr Gly Trp Met Val Thr Ser Leu Pro Leu Tyr Asn Asp Asp Asp Leu Leu Lys Arg Asn Glu Asn Ile Tyr Gln Ile Tyr Ser Lys Arg Ser Ala Glu Asp Ile Tyr Lys Ile Leu Thr Ser Tyr Lys Ala Asn Tyr Leu lle Val Glu Asp Ala Ile Cys Asn Glu Val Gly Pro Thr Arg Gly Cys Arg Val Lys Asp Leu Leu Asp Ile Ala Asn Gly His Met Val Cys Glu Glu Gly Asp Lys Leu Thr Tyr Ser Lys Tyr Gly Arg Phe Cys His Glu Val Lys Ile Asn Tyr Ser Pro Tyr Val Asn Tyr Phe Thr Arg Val Tyr Trp Asn Arg Ser Tyr Phe Val Tyr Lys lle Asn Thr Val Ile Ser Phe Gln Ser

<210> 3023

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3023

Met Gly Val Ser Val Asp Val His Gln Val Tyr Lys Tyr Pro Phe Glu

1 5 10 15

Gln Val Val Ala Ser Phe Leu Arg Lys Tyr Pro Asn Pro Met Asp Lys

20 25 30

Asn Val Ile Ser Val Lys Ile Met Glu Glu Lys Arg Asp Glu Ser Thr

		35					40					45			
Gly	Val	lle	Tyr	Arg	Lys	Arg	lle	Ala	He	Cys	Gln	Asn	Val	Val	Pro
	50					55					60				
Glu	Ile	Leu	Arg	Lys	Val	Ser	11e	Leu	Lys	Val	Pro	Asn	lle	Gln	Leu
65					70					75					80
Glu	Glu	Glu	Ser	Trp	Leu	Asn	Pro	Arg	Glu	Arg	Asn	Met	Ala	lle	Arg
				85					90					95	
Ser	His	Cys	Leu	Thr	Trp	Thr	Gln	Tyr	Ala	Ser	Met	Lys	Glu	${\tt Glu}$	Ser
			100					105					110		
Val	Phe	Arg	Glu	Ser	Met	Glu	Asn	Pro	Asn	Trp	Thr	Glu	Phe	Ile	G1n
		115					120					125			
Arg	G1 y	Arg	Ile	Ser	He	Thr	Gly	Val	Gly	Phe	Leu	Asn	Cys	Val	Leu
	130					135					140				
Glu	Thr	Phe	Ala	Ser	Thr	Phe	Leu	Arg	Gln	G1 y	Ala	Gln	Lys	Val	Thr
145					150					155					160
lle	Phe	Leu	Leu												

<210> 3024

<211> 735

<212> PRT

<213> Homo sapiens

<400> 3024

Met Ala Glu Pro Leu Leu Arg Lys Thr Phe Ser Arg Leu Arg Gly Arg

1 5 10 15

Glu Lys Leu Pro Arg Lys Lys Ser Asp Ala Lys Glu Arg Gly His Pro 20 25 30

Ala Gln Arg Pro Glu Pro Ser Pro Pro Glu Pro Glu Pro Gln Ala Pro
35 40 45

Glu Gly Ser Gln Ala Gly Ala Glu Gly Pro Ser Ser Pro Glu Ala Ser 50 55 60

Arg Ser Pro Ala Arg Gly Ala Tyr Leu Gln Ser Leu Glu Pro Ser Ser 65 70 75 80

Arg Arg Trp Val Leu Gly Gly Ala Lys Pro Ala Glu Asp Thr Ser Leu

				85					90					95	
Gly	Pro	Gly	Val	Pro	G1y	Thr	Gly	Glu	Pro	Ala	Gly	Glu	lle	Trp	Tyr
			100					105					110		
Asn	Pro	He	Pro	Glu	Glu	Asp	Pro	Arg	Pro	Pro	Ala	Pro	Glu	Pro	Pro
		115					120					125			
Gly	Pro	Gln	Pro	Gly	Ser	Ala	Glu	Ser	Glu	Gly	Leu	Ala	Pro	Gln	G1y
	130					135					140				
Ala	Ala	Pro	Ala	Ser	Pro	Pro	Thr	Lys	Ala	Ser	Arg	Thr	Lys	Ser	Pro
145					150					155					160
Gly	Pro	Ala	Arg	Arg	Leu	Ser	Пе	Lys	Met	Lys	Lys	Leu	Pro	Glu	Leu
				165					170					175	
Arg	Arg	Arg	Leu	Ser	Leu	Arg	Gly	Pro	Arg	Ala	Gly	Arg	Glu	Arg	Glu
			180					185					190		
Λrg	Ala	Ala	Pro	Ala	Gly	Ser	Val	He	Ser	Arg	Tyr	His	Leu	Asp	Ser
		195					200					205			
Ser	Val	Gly	Gly	Pro	Gly	Pro	Ala	Ala	G1 y	Pro	Gly	Gly	Thr	Arg	Ser
	210					215					220				
Pro	Arg	Ala	Gly	Tyr	Leu	Ser	Asp	Gly	Asp	Ser	Pro	Glu	Arg	Pro	Ala
225					230					235					240
Gly	Pro	Pro	Ser	Pro	Thr	Ser	Phe	Arg	Pro	Tyr	Glu	Val	Gly	Pro	Ala
				245					250					255	
Ala	Arg	Ala	Pro	Pro	Ala	Ala	Leu	Trp	Gly	Arg	Leu	Ser	Leu	His	Leu
			260					265					270		
Tyr	Gly	Leu	G1 y	Gly	Leu	Arg	Pro	Ala	Pro	Gly	Ala	Thr	Pro	Arg	Asp
		275					280					285			
Leu	Cys	Cys	Leu	Leu	Gln	Val	Asp	G1 y	Glu	Ala	Arg	Ala	Arg	Thr	Gly
	290					295					300				
Pro	Leu	Arg	Gly	Gly	Pro	Asp	Phe	Leu	Arg	Leu	Asp	His	Thr	Phe	His
305					310					315					320
Leu	Glu	Leu	G] u	Ala	Ala	Arg	Leu	Leu	Arg	Ala	Leu	Val	Leu	Ala	Trp
				325					330					335	
Asp	Pro	Gly	Val	Arg	Arg	His	Arg	Pro	Cys	Ala	Gln	Gly	Thr	Val	Leu
			340					345					350		
Leu	Pro	Thr	Val	Phe	Arg	Gly	Cys	Gln	Ala	Gln	Gln	Leu	Ala	Val	Arg
		355					360					365			
Leu	Glu	Pro	Gln	Gly	Leu	Leu	Tyr	Ala	Lys	Leu	Thr	Leu	Ser	G1u	Gln

	370					375					380				
Gln	Glu	Ala	Pro	Ala	Thr	Ala	Glu	Pro	Arg	Val	Phe	Gly	Leu	Pro	Leu
385					390					395					400
Pro	Leu	Leu	Val	Glu	Arg	Glu	Arg	Pro	Pro	G1 y	Gln	Val	Pro	Leu	Пе
				405					410					415	
Пе	Gln	Lys	Cys	Val	Gly	Gln	lle	Glu	Arg	Arg	Gly	Leu	Arg	Val	Val
			420					425					430		
Gly	Leu	Tyr	Arg	Leu	Cys	Gly	Ser	Ala	Ala	Val	Lys	Lys	Glu	Leu	Arg
		435					440					445			
Asp	Ala	Phe	Glu	Arg	Asp	Ser	Ala	Ala	Val	Cys	Leu	Ser	Glu	Asp	Leu
	450					455					460				
Tyr	Pro	Asp	lle	Asn	Val	lle	Thr	Gly	He	Leu	Lys	Asp	Tyr	Leu	Arg
465					470					475					480
Glu	Leu	Pro	Thr	Pro	Leu	lle	Thr	Gln	Pro	Leu	Tyr	Lys	Val	Val	Leu
				485					490					495	
Glu	Ala	Met		Arg	Asp	Pro	Pro		Arg	Val	Pro	Pro		Thr	Glu
			500					505					510		
Gly	Thr		Gly	Leu	Leu	Ser		Leu	Pro	Asp	Val		Arg	Ala	Thr
		515					520					525			
Leu		Leu	Leu	Leu	Asp	His	Leu	Arg	Leu	Val		Ser	Phe	His	Ala
m	530			m)	Б	535		,	. 1	., .	540	D.	61	D	., .
	Asn	Arg	Met	lhr		Gln	Asn	Leu	Ala		Cys	Phe	Gly	Pro	
545	1	D	A 1 -	Λ	550	A 1 -	D	ть	Λ	555	A	A 1 -	Λ	C	560
Leu	Leu	Pro	VIa		Gin	Ala	Pro	ınr	570	Pro	Arg	Ala	Arg	575	ser
C1v	Dro	Cly	Lou	565	Sor	Ala	Vol	Aan		Lva	Цia	Hic	110		Vol.
Uly	110	Oly	580	Міа	Sei	лта	vai	585	THE	Lys	1112	1115	590	Olu	vai
Len	Hic	Tyr		Leu	Gln	Ser	Trn		Asn	Pro	Arg	l eu		Arg	Gln
Lcu	1115	595	Leu	Leu	0111	56,	600	110	пор	110	m g	605	110	111 5	OIII
Ser	Pro		Val	Ala	Pro	Tyr		Arg	Pro	Lvs	Arg		Pro	Pro	Leu
	610					615				, -	620				
His		Pro	Leu	Ala	Asp	Pro	Glu	Val	Val	Thr		Pro	Arg	Gly	Arg
625					630					635					640
	Gly	Pro	Glu	Ser		Pro	Ser	Asn	Arg		Ala	Gly	Asp	Trp	Ser
-				645					650					655	
Val	Cvs	Glv	Arg	Asp	Phe	Leu	Pro	Cvs	Glv	Arg	Asp	Phe	Leu	Ser	Glv

660 665 670 Pro Asp Tyr Asp His Val Thr Gly Ser Asp Ser Glu Asp Glu Asp Glu 680 Glu Val Gly Glu Pro Arg Val Thr Gly Asp Phe Glu Asp Asp Phe Asp 695 700 690 Ala Pro Phe Asn Pro His Leu Asn Leu Lys Asp Phe Asp Ala Leu 11e 710 715 Leu Asp Leu Glu Arg Glu Leu Ser Lys Gln Ile Asn Val Cys Leu 725 730 735

<210> 3025

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3025

Met Leu Pro Arg Leu Glu Cys Ser Gly Val Ile Ser Ala His Cys Ser
1 5 10 15

Leu His Leu Leu Gly Ser Ser Ser Pro Pro Thr Ser Thr Ser Leu Arg
20 25 30

Ala Glu Thr Thr Gly Val Ser His His Ala Trp Leu Ile Phe Arg Asp 35 40 45

Arg Val Ser Pro Ser Cys Pro Gly Trp Ser Gln Thr Pro Gly Leu Lys
50 55 60

Gln Ser Ser Cys Leu Ser Leu Pro Glu Tyr Trp Asp Tyr Arg Cys Glu
65 70 75 80

Pro Leu Pro Glu Lys Arg Phe Leu Arg Gln Gly Arg Ser Tyr lle Ile 85 90 95

Phe Lys Phe Phe Leu Met Met Ser Phe Leu Ala Val His Ser Gln Arg 100 105 110

Thr Thr His His Thr Gln Glu Thr Val Val Leu Met 115 120

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<212> PRT
<213> Homo sapiens
<400> 3026
Met Ser Phe Glu Gly Gly Asp Gly Ala Gly Pro Ala Met Leu Ala Thr
                                     10
Gly Thr Ala Arg Met Ala Ser Gly Arg Pro Glu Glu Leu Trp Glu Ala
             20
                                 25
                                                      30
Val Val Gly Ala Ala Glu Arg Phe Arg Ala Arg Thr Gly Thr Glu Leu
                             40
Val Leu Leu Thr Ala Ala Pro Pro Pro Pro Pro Arg Pro Gly Pro Cys
                         55
Ala Tyr Ala Ala His Gly Arg Gly Ala Leu Ala Glu Ala Ala Arg Arg
                     70
                                          75
Cys Leu His Asp lle Ala Leu Ala His Arg Ala Ala Thr Ala Ala Arg
                                     90
                 85
Pro Pro Ala Pro Pro Pro Ala Pro Gln Pro Pro Ser Pro Thr Pro Ser
                                105
            100
                                                     110
Pro Pro Arg Pro Thr Leu Ala Arg Glu Asp Asn Glu Glu Asp Glu Asp
                                                 125
                            120
Glu Pro Thr Glu Thr Glu Thr Ser Gly Glu Gln Leu Gly Ile Ser Asp
                        135
Asn Gly Gly Leu Phe Val Met Asp Glu Asp Ala Thr Leu Gln Asp Leu
145
                    150
                                         155
                                                             160
Pro Pro Phe Cys Glu Ser Asp Pro Glu Ser Thr Asp Asp Gly Ser Leu
                                    170
                165
Ser Glu Glu Thr Pro Ala Gly Pro Pro Thr Cys Ser Val Pro Pro Ala
            180
                                185
                                                     190
Ser Ala Leu Pro Thr Gln Gln Tyr Ala Lys Ser Leu Pro Val Ser Val
        195
                                                 205
                            200
Pro Val Trp Gly Phe Lys Glu Lys Arg Thr Glu Ala Arg Ser Ser Asp
                        215
                                             220
Glu Glu Asn Gly Pro Pro Ser Ser Pro Asp Leu Asp Arg Ile Ala Ala
225
                    230
                                         235
                                                             240
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Ser Met Arg Ala Leu Val Leu Arg Glu Ala Glu Asp Thr Gln Val Phe

<211> 276

245 250 255 Gly Asp Leu Pro Arg Pro Arg Leu Asn Thr Ser Asp Phe Gln Lys Leu 265 270 Lys Arg Lys Tyr 275 <210> 3027 <211> 100 <212> PRT <213> Homo sapiens <400> 3027 Met Lys Asn Ala Leu Gln Ala Trp Ser lle Ile Thr Tyr Gly Ile Ser l 5 10 Cys Phe Lys Ile Ser Ser Asp Ile Tyr Leu Val Lys Phe His Phe Arg 25 Arg Leu Arg Cys Arg Thr Leu Met Phe Ile Thr Ser Ser Tyr Pro Lys 45 35 40 Arg Asn Gly Phe Arg His Val Leu Ser Gln Gln Glu Ile Asp Phe Phe 55 Leu Asn Tyr Leu Ile Leu Leu Pro Asn Ile Thr Glu Val Met Arg Ser 70 75 Leu Val Thr Phe Gly Cys Cys Ala Leu Lys Glu Pro Gly Leu Glu Phe 85 90 95 Val Gly Val 11e 100

<210> 3028

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3028

Met Asp Gln Leu Leu Asp Thr Ile Arg Ser Leu Thr Ile Gly Cys Ser

Ser Cys Ser Ser Leu Met Glu His Phe Glu Asp Thr Arg Glu Lys Asn Glu Ala Leu Leu Gly Glu Leu Phe Ser Ser Pro His Leu Gln Met Leu Leu Asn Pro Glu Cys Asp Pro Trp Pro Leu Asp Met Gln Pro Leu Leu Asn Lys Gln Ser Asp Asp Trp Gln Trp Ala Ser Ala Ser Ala Lys Ser Glu Glu Glu Lys Leu Ala Glu Leu Ala Arg Gln Leu Gln Glu Ser Ala Ala Lys Leu His Ala Leu Arg Thr Glu Ser Thr Thr Thr Ser Trp Ala Ser Ala Ala Ser Ala Gln Ala Leu Thr Ser Thr Arg Ala Ala Pro Ser Ser Arg Pro Arg Thr Arg lle <210> 3029 <211> 617 <212> PRT <213> Homo sapiens <400> 3029 Met Val Pro Val Glu Asn Thr Glu Gly Pro Ser Leu Leu Asn Gln Lys Gly Thr Ala Val Glu Thr Glu Gly Ser Gly Ser Arg His Pro Pro Trp Ala Arg Gly Cys Gly Met Phe Thr Phe Leu Ser Ser Val Thr Ala Ala Val Ser Gly Leu Leu Val Gly Tyr Glu Leu Gly Ile 11e Ser Gly Ala

Leu Leu Gln Ile Lys Thr Leu Leu Ala Leu Ser Cys His Glu Gln Glu

M	et	Val	Val	Ser	Ser	Leu	Val	Πle	Gly	Ala	Leu	Leu	Ala	Ser	Leu	Thr
					85					90					95	
G	lу	Gly	Val	Leu	He	Asp	Arg	Tyr	Gly	Arg	Arg	Thr	Ala	He	He	Leu
				100					105					110		
S	er	Ser	Cys	Leu	Leu	Gly	Leu	Gly	Ser	Leu	Val	Leu	He	Leu	Ser	Leu
			115					120					125			
S	er	Tyr	Thr	Val	Leu	He	Val	Gly	Arg	lle	Ala	He	Gly	Val	Ser	11e
		130					135					140				
S	er	Leu	Ser	Ser	Ile	Ala	Thr	Cys	Val	Tyr	Ile	Ala	Glu	lle	Ala	Pro
ŀ	45					150					155					160
G	ln	His	Arg	Arg	Gly	Leu	Leu	Val	Ser	Leu	Asn	Glu	Leu	Met	He	Val
					165					170					175	
1	l e	Gly	He	Leu	Ser	Ala	Tyr	He	Ser	Asn	Tyr	Ala	Phe	Ala	Asn	Val
				180					185					190		
P	he	His	Gly	Trp	Lys	Tyr	Met	Phe	Gly	Leu	Val	He	Pro	Leu	Gly	Va]
			195					200					205			
L	eu		Ala	He	Ala	Met		Phe	Leu	Pro	Pro		Pro	Arg	Phe	Leu
		210					215					220				
		Met	Lys	Gly	Gln		Gly	Ala	Ala	Ser		Val	Leu	Gly	Arg	
	25			_		230				_	235				_	240
A	rg	Ala	Leu	Ser		Thr	Thr	Glu	Glu		Thr	Val	He	Lys		Ser
					245	6.3			D)	250		_	121		255	
L	eu	Lys	Asp	Glu	Tyr	GIn	Tyr	Ser		Trp	Asp	Leu	Phe		Ser	Lys
				260	T)				265	61	,	T)		270	121	DI.
A	sp	Asn		Arg	Ihr	Arg	116		116	GIy	Leu	Ihr		Val	Phe	Phe
v	. 1	C1	275	T1	C1	C1	p., .	280	т.	1	Di	т	285	C	T1	V 1
V	aı		116	Thr	GIŸ	GIN		ASI	116	Leu	rne	300	АТа	ser	ınr	vai
1	e	290	San	Val	Clu	Dho	295	Cor	Aan	C1.	A1.a		Sor	Lou	416	Son
	eu 05	riz	261	vai	GTÀ	310	GIH	sei	ASH	Giu	315	MIA	261	Leu	МІА	320
		Clv:	Val	Gly	Val		lve	Val	Ha	Sor		По	Pro	Ala	Thr	
1	111	Oly	, (1)	Gry	325	1 611	Lys	101	110	330	1111	110	110	MIG	335	ı,cu
1	(21)	Val	Asn	His		Glv	Ser	lvs	Thr		len	Cvs	He	Glv		Ser
1	, u	1 (11	пар	340	, (1)	Oly	561	د ر ــ	345	1 110	1,0 U	Cyo		350	501	001
V	al	Met	Ala	Ala	Ser	Leu	Val	Thr		Glv	He	Val	Asn		Asn	He
• •	1		355	1110	QC1	,, c u	,	360		01)			365	200		

His	Met	Asn	Phe	Thr	His	Πle	Cys	Arg	Ser	His	Asn	Ser	lle	Asn	Gln
	370					375					380				
Ser	Leu	Asp	Glu	Ser	Val	He	Tyr	Gly	Pro	Gly	Asn	Leu	Ser	Thr	Asn
385					390					395					400
Asn	Asn	Thr	Leu	Arg	Asp	His	Phe	Lys	Gly	lle	Ser	Ser	His	Ser	Arg
				405					410					415	
Ser	Ser	Leu	Met	Pro	Leu	Arg	Asn	Asp	Val	Asp	Lys	Arg	Gly	Glu	Thr
			420					425					430		
Thr	Ser	Ala	Ser	Leu	Leu	Asn	Ala	Gly	Leu	Ser	His	Thr	Glu	Tyr	Gln
		435					440					445			
Ile	Val	Thr	Asp	Pro	Gly	Asp	Val	Pro	Ala	Phe	Leu	Lys	Trp	Leu	Ser
	450					455					460				
Leu	Ala	Ser	Leu	Leu	Val	Tyr	Val	Ala	Ala	Phe	Ser	lle	Gly	Leu	Gly
465					470					475					480
Pro	Met	Pro	Trp	Leu	Va]	Leu	Ser	Glu	lle	Phe	Pro	Gly	Gly	lle	Arg
				485					490					495	
G1y	Arg	Ala	Met	Ala	Leu	Thr	Ser	Ser	Met	Asn	Trp	Gly	Ile	Asn	Leu
			500					505					510		
Leu	He	Ser	Leu	Thr	Phe	Leu	Thr	Val	Thr	Asp	Leu	lle	Gly	Leu	Pro
		515					520					525			
Trp	Val	Cys	Phe	He	Tyr	Thr	He	Met	Ser	Leu	Ala	Ser	Leu	Leu	Phe
	530					535					540				
Va]	Val	Met	Phe	He	Pro	Glu	Thr	Lys	Gly	Cys	Ser	Leu	Glu	Gln	Пе
545					550					555					560
Ser	Met	Glu	Leu	Ala	Lys	Val	Asn	Tyr	Val	Lys	Asn	Asn	lle	Cys	Phe
				565					570					575	
Met	Ser	His	His	G1n	Glu	Glu	Leu	Val	Pro	Lys	Gln	Pro	Gln	Lys	Arg
			580					585					590		
Lys	Pro	Gln	Glu	Gln	Leu	Leu	G1u	Cys	Asn	Lys	Leu	Cys	G1 y	Arg	Gly
		595					600					605			
Gln	Ser	Arg	Gln	Leu	Ser	Pro	Glu	Thr							
	610					615									

<210> 3030

<211> 895

<212> PRT <213> Homo sapiens <400> 3030 Met Phe Pro Thr Gly Phe Ser Ser Pro Ser Pro Ser Ala Ala Ala Ala Gln Glu Val Arg Ser Ala Thr Asp Gly Asn Thr Ser Thr Thr Pro Pro Thr Ser Ala Lys Lys Arg Lys Leu Asn Ser Ser Ser Ser Ser Ser Ser Asn Arg Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Ser Thr Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys Met Ala Glu Glu Ser Ser Ser Ser Pro Ser Ser Ser Ser Pro Thr Ala Ala Thr Ser Gln Gln Gln Gln Leu Lys Asn Lys Ser Ile Leu 11e Ser Ser Val Ala Ser Val His His Ala Asn Gly Leu Ala Lys Ser Ser Thr Thr Val Ser Ser Phe Ala Asn Ser Lys Pro Gly Ser Ala Lys Lys Leu Val 11e Lys Asn Phe Lys Asp Lys Pro Lys Leu Pro Glu Asn Tyr Thr Asp Glu Thr Trp Gln Lys Leu Lys Glu Ala Val Glu Ala lle Gln Asn Ser Thr Ser lle Lys Tyr Asn Leu Glu Glu Leu Tyr Gln

Ala Val Glu Asn Leu Cys Ser Tyr Lys lle Ser Ala Asn Leu Tyr Lys

Gln Leu Arg Gln Ile Cys Gly Asp His Ile Lys Ala Gln Ile His Gln

Phe	Arg	Glu	Asp 260	Ser	Leu	Asp	Ser	Val 265	Leu	Phe	Leu	Lys	Lys 270	He	Asp
Arg	Cys	Trp 275	Gln	Asn	His	Cys	Arg 280	Gln	Met	lle	Met	He 285	Arg	Ser	lle
Phe	Leu 290	Phe	Leu	Asp	Arg	Thr 295	Tyr	Val	Leu	Gln	Asn 300	Ser	Met	Leu	Pro
Ser 305	lle	Trp	Asp	Met	Gly 310	Leu	Glu	Leu	Phe	Arg 315	Ala	His	lle	Ile	Ser 320
Asp	Gln	Lys	Val	Gln 325	Asn	Lys	Thr	He	Asp 330	Gly	lle	Leu	Leu	Leu 335	Ile
G1u	Arg	Glu	Arg 340	Asn	Gly	Glu	Ala	11e 345	Asp	Arg	Ser	Leu	Leu 350	Arg	Ser
Leu	Leu	Ser 355	Met	Leu	Ser	Asp	Leu 360	Gln	He	Tyr	Gln	Asp 365	Ser	Phe	Glu
Gln	Arg 370	Phe	Leu	Glu	Glu	Thr 375	Asn	Arg	Leu	Tyr	Ala 380	Ala	Glu	G1 y	Gln
Lys 385	Leu	Met	Gln	Glu	Arg 390	Glu	Val	Pro	Glu	Tyr 395	Leu	His	His	Val	Asn 400
Lys	Arg	Leu	Glu	Glu 405	Glu	Ala	Asp	Arg	Leu 410	lle	Thr	Tyr	Leu	Asp 415	Gln
Thr	Thr	Gln	Lys 420	Ser	Leu	lle	Ala	Thr 425	Val	Glu	Lys	Gln	Leu 430	Leu	Gly
Glu	His	Leu 435	Thr	Ala	Ile	Leu	Gln 440	Lys	Gly	Leu	Asn	Asn 445	Leu	Leu	Asp
Glu	Asn 450	Arg	lle	Gln	Asp	Leu 455	Ser	Leu	Leu	Tyr	61n 460	Leu	Phe	Ser	Arg
Val 465	Arg	Gly	Gly	Val	Gln 470	Val	Leu	Leu	G1n	Gln 475	Trp	lle	Glu	Tyr	11e 480
Lys	Ala	Phe	Gly	Ser 485	Thr	He	Val	He	Asn 490	Pro	G1u	Lys	Asp	Lys 495	Thr
Met	Val	Gln	Glu 500	Leu	Leu	Asp	Phe	Lys 505	Asp	Lys	Val	Asp	His 510	He	lle
Asp	lle	Cys 515	Phe	Leu	Lys	Asn	Glu 520	Lys	Phe	He	Asn	Ala 525	Met	Lys	Glu
Ala	Phe 530	Glu	Thr	Phe	11e	Asn 535	Lys	Arg	Pro	Asn	Lys 540	Pro	Ala	Glu	Leu

Ile /	Ala	Lys	Tyr	Val	Asp 550	Ser	Lys	Leu	Arg	Ala 555	Gly	Asn	Lys	Glu	Ala 560
Thr A	Asp	Glu	Glu	Leu 565	Glu	Lys	Met	Leu	Asp 570	Lys	He	Met	lle	11e 575	Phe
Arg I	Phe	He	Tyr 580	Gly	Lys	Лsp	Val	Phe 585	Glu	Ala	Phe	Tyr	Lys 590	Lys	Asp
Leu /	Ala	Lys 595	Arg	Leu	Leu	Val	G1 y 600	Lys	Ser	Ala	Ser	Val 605	Asp	Ala	Glu
Lys S	Ser 610	Met	Leu	Ser	Lys	Leu 615	Lys	His	Glu	Cys	Gly 620	Ala	Ala	Phe	Thr
Ser 1 625	Lys	Leu	Glu	Gly	Met 630	Phe	Lys	Asp	Met	Glu 635	Leu	Ser	Lys	Asp	Ile 640
Met]	lle	Gln	Phe	Lys 645	Gln	Tyr	Met	Gln	Asn 650	GIn	Asn	Val	Pro	Gly 655	Asn
Ile (Glu	Leu	Thr 660	Val	Asn	lle	Leu	Thr 665	Met	Gly	Tyr	Trp	Pro 670	Thr	Tyr
Val F	Pro	Met 675	Glu	Val	His	Leu	Pro 680	Pro	Glu	Met	Val	Lys 685	Leu	Gln	Glu
Ile I	Phe 690	Lys	Thr	Phe	Tyr	Leu 695	Gly	Lys	His	Ser	Gly 700	Arg	Lys	Leu	G1n
Trp (Gln	Ser	Thr	Leu	Gly 710	His	Cys	Val	Leu	Lys 715	Ala	Glu	Phe	Lys	Glu 720
Gly I	Lys	Lys	Glu	Leu 725	Gln	Val	Ser	Leu	Phe 730	Gln	Thr	Leu	Val	Leu 735	Leu
Met 1	Phe	Asn	Glu 740	Gly	Glu	Glu	Phe	Ser 745	Leu	Glu	Glu	lle	Lys 750	Gln	Ala
Thr (Gly	Ile 755	Glu	Asp	Gly	Glu	Leu 760	Arg	Arg	Thir	Leu	Gln 765	Ser	Leu	Ala
Cys (Gly 770	Lys	Ala	Arg	Val	Leu 775	Ala	Lys	Asn	Pro	Lys 780	Gly	Lys	Asp	lle
Glu / 785	N sp	Gly	Asp	Lys	Phe 790	lle	Cys	Asn	Asp	Asp 795	Phe	Lys	His	Lys	Leu 800
Phe /	Arg	lle	Lys	11e 805	Asn	G]n	He	Gln	Met 810	Lys	Glu	Thr	Val	Glu 815	G1u
Gln /	Ala	Ser	Thr 820	Thr	Glu	Arg	Val	Phe 825	Gln	Asp	Arg	Gln	Tyr 830	Gln	lle

 Asp Ala Ala Ile Val Arg Ile Met Lys Met Arg Lys Thr Leu Ser His

 835
 840
 845

 Asn Leu Leu Val Ser Glu Val Tyr Asn Gln Leu Lys Phe Pro Val Lys
 850
 855

 Pro Ala Asp Leu Lys Lys Arg Ile Glu Ser Leu Ile Asp Arg Asp Tyr
 860

 Met Glu Arg Asp Lys Glu Asn Pro Asn Gln Tyr Asn Tyr Ile Ala
 880

 885
 885

<210> 3031

<211> 160

<212> PRT

<213> Homo sapiens

<400> 3031

145

Met Leu Ser His Leu Leu Ala Tyr Arg Arg Ser Arg Asp Phe Ile Asp 10 Val Cys Glu Val Ser Glu Asn Val Pro Ala Phe Thr Pro Ala Phe Ser 20 25 30 His Trp His Leu Leu Leu Thr Trp Ala Ile Trp Pro Cys Met Val Leu 40 Gly Glu Ser Ser Leu Thr Leu Gln Met Leu Ser Ser Asp Leu Ala Gly 50 55 Lys Gly Asp Gln Glu Cys Arg Ala Pro Ala Glu Asp Ser Pro Lys Pro 70 75 80 Lys Ser Gln Arg Val Gly Ala Pro Thr Thr Ser Ala Cys Met Pro Phe 90 Pro Gly Ser Pro Gln Ala Asp Ser Gln His Pro Leu Pro Lys Asp Arg 100 105 110 Ala Val Pro Asp Gln His Pro Thr Lys Ser Ser Val Arg Pro Val Phe 120 Gly Gly Ala Gly Phe Gln Glu Asp Ser Gly Gly Gly Val Glu Leu Met 130 135 140

Ala Gly Gly Ser Gly Pro Leu Arg Lys Leu Cys His Trp Ala Trp Gly

155

160

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<211> 570
<212> PRT
<213> Homo sapiens
<400> 3032
Met Ala Gly Leu Thr Ala Ala Ala Pro Arg Pro Gly Val Leu Leu Leu
                                     10
Leu Leu Ser Ile Leu His Pro Ser Arg Pro Gly Gly Val Pro Gly Ala
                                 25
Ile Pro Gly Gly Val Pro Gly Gly Val Phe Tyr Pro Gly Ala Gly Leu
         35
                             40
                                                 45
Gly Ala Leu Gly Gly Gly Ala Leu Gly Pro Gly Gly Lys Pro Leu Lys
                         55
Pro Val Pro Gly Gly Leu Ala Gly Ala Gly Leu Gly Ala Gly Val Gly
Gly Ala Phe Ala Gly Ile Pro Gly Val Gly Pro Phe Gly Gly Pro Gln
                 85
                                     90
Pro Gly Val Pro Leu Gly Tyr Pro Ile Lys Ala Pro Lys Leu Pro Gly
                                105
Tyr Gly Pro Gly Gly Val Ala Gly Ala Ala Gly Lys Ala Gly Tyr Pro
                            120
                                                 125
        115
Thr Gly Thr Gly Val Gly Pro Gln Ala Ala Ala Ala Ala Ala Ala Lys
                        135
Ala Ala Ala Lys Phe Gly Ala Gly Ala Ala Gly Val Leu Pro Gly Val
                    150
                                        155
Gly Gly Ala Gly Val Pro Gly Val Pro Gly Ala Ile Pro Gly lle Gly
                165
                                    170
                                                         175
Gly Ile Ala Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Ala Ala Ala
                                185
Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Ala Gly Leu Val Pro Gly
        195
                            200
                                                 205
Gly Pro Gly Phe Gly Pro Gly Val Val Gly Val Pro Gly Ala Gly Val
```

215

220

<210> 3032

Pro	Gly	Val	Gly	Val	Pro	Gly	Ala	Gly	Ile	Pro	Val	Val	Pro	Gly	Ala
225					230					235					240
G1 y	He	Pro	Gly	Ala	Ala	Val	Pro	Gly	Val	Val	Ser	Pro	Glu	Ala	Ala
				245					250					255	
Ala	Lys	Ala	Ala	Ala	Lys	Ala	Ala	Lys	Tyr	Gly	Ala	Arg	Pro	Gly	Val
			260					265					270		
Gly	Val	Gly	Gly	He	Pro	Thr	Tyr	Gly	Val	Gly	Ala	Gly	Gly	Phe	Pro
		275					280					285			
Gly	Phe	Gly	Val	Gly	Val	Gly	Gly	Ile	Pro	Gly	Val	Ala	Gly	Val	Pro
	290					295					300				
Ser	Val	Gly	Gly	Val	Pro	Gly	Val	Gly	Gly	Val	Pro	Gly	Val	Gly	Ile
305					310					315					320
Ser	Pro	Glu	Ala	Gln	Ala	Ala	Ala	Ala	Ala	Lys	Ala	Ala	Lys	Tyr	Gly
				325					330					335	
Leu	Val	Pro	Gly	Val	Gly	Val	Ala	Pro	G1 y	Val	Gly	Val	Ala	Pro	Gly
			340					345					350		
Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Leu	Ala	Pro	Gly	Val	Gly	Val	Ala
		355					360					365			
Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	He	Gly
	370					375					380				
Pro	Gly	Gly	lle	Ala	Ala	Ala	Ala	Lys	Ser	Ala	Ala	Lys	Val	Ala	Ala
385					390					395					400
Lys	Ala	Gln	Leu	Arg	Ala	Ala	Ala	Gly	Leu	Gly	Ala	Gly	He	Pro	Gly
				405					410					415	
Leu	Gly	Val	Gly	Val	Gly	Val	Pro	Gly	Leu	Gly	Val	Gly	Ala	Gly	Val
			420					425					430		
Pro	Gly	Leu	Gly	Val	Gly	Ala	Gly	Val	Pro	Gly	Phe	Gly	Ala	Val	Pro
		435					440					445			
Gly		Leu	Ala	Ala	Ala	Lys	Ala	Ala	Lys	Tyr		Ala	Ala	Val	Pro
	450					455					460				
	Va]	Leu	Gly	Gly		Gly	Ala	Leu	Gly		Val	Gly	lle	Pro	
465					470	_				475					480
Gly	Val	Val	Gly		Gly	Pro	Ala	Ala		Ala	Ala	Ala	Ala		Ala
				485					490	0.7			0.3	495	0.
Ala	Ala	Lys		Ala	Gln	Phe	G1 y		Val	Gly	Ala	Ala		Leu	Gly
			500					505					510		

G1y Leu G1y Va1 G1y G1y Leu G1y Va1 Pro G1y Va1 G1y G1y Leu G1y 525

<210> 3033

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3033

Met Val Ala Asp Pro Pro Arg Asp Ser Lys Gly Leu Ala Ala Glu
1 5 10 15

Pro Thr Ala Asn Gly Gly Leu Ala Leu Ala Ser Ile Glu Asp Gln Gly
20 25 30

Ala Ala Ala Gly Gly Tyr Cys Gly Ser Arg Asp Gln Val Arg Arg Cys
35 40 45

Leu Arg Ala Asn Leu Leu Val Leu Leu Thr Val Val Cys Ser Leu 50 55 60

11e Gly Gly Ala Ala Ser Leu Asp Pro Gly Ala Leu Gly Arg Leu Gly
65 70 75 80

Ala Trp Ala Leu Leu Phe Phe Leu Val Thr Thr Leu Leu Ala Ser Ala 85 90 95

Leu Gly Val Gly Leu Ala Leu Ala Leu Gln Pro Gly Ala Ala Ser Ala 100 105 110

Ala lle Asn Ala Ser Val Gly Ala Ala Gly Ser Ala Glu Asn Ala Pro 115 120 125

Ser Lys Glu Val Leu Asp Ser Phe Leu Asp Leu Ala Arg Asn lle Phe 130 135 140

Pro Ser Asn Leu Val Ser Ala Ala Phe Arg Ser Tyr Ser Thr Thr Tyr 145 150 155 160

Glu	Glu	Arg	Asn	He	Thr	Gly	Thr	Arg	Val	Lys	Val	Pro	Val	Gly	Gln
				165					170					175	
Glu	Val	Glu	Gly	Met	Asn	lle	Leu	Gly	Leu	Val	Val	Phe	Ala	He	Val
			180					185					190		
Phe	Gly	Val	Ala	Leu	Arg	Lys	Leu	Gly	Pro	Glu	Gly	Glu	Leu	Leu	Ile
		195					200					205			
Arg	Phe	Phe	Asn	Ser	Phe	Asn	Glu	Ala	Thr	Met	Val	Leu	Val	Ser	Trp
	210					215					220				
Ile	Met	Trp	Tyr	Ala	Pro	Val	Gly	lle	Met	Phe	Leu	Val	Ala	Gly	Lys
225					230					235					240
He	Val	Glu	Met	Glu	Asp	Val	Gly	Leu	Leu	Phe	Ala	Arg	Leu	Gly	Lys
				245					250					255	
Tyr	lle	Leu	Cys	Cys	Leu	Leu	Gly	His	Ala	He	His	Gly	Leu	Leu	Val
			260					265					270		
Leu	Pro	Leu	11e	Tyr	Phe	Leu	Phe	Thr	Arg	Lys	Asn	Pro	Tyr	Arg	Phe
		275					280					285			
Leu	Trp	Gly	Ile	Val	Thr	Pro	Leu	Ala	Thr	Ala	Phe	Gly	Thr	Ser	Ser
	290					295					300				
Ser	Ser	Ala	Thr	Leu	Pro	Leu	Met	Met	Lys	Cys	Val	Glu	Glu	Asn	Asn
305					310					315					320
Gly	Val	Ala	Lys	His	He	Ser	Arg	Phe	Ile	Leu	Pro	lle	Gly	Ala	Thr
				325					330					335	
Val	Asn	Met	Asp	Gly	Ala	Ala	Leu	Phe	Gln	Cys	Val	Ala	Ala	Val	Phe
			340					345					350		
lle	Ala	Gln	Leu	Ser	Gln	Gln		Leu	Asp	Phe	Val	Lys	Ile	He	Thr
		355					360					365			
He		Val	Thr	Ala	Thr	Ala	Ser	Ser	Val	Gly		Ala	Gly	lle	Pro
	370					375					380				
	Gly	Gly	Val	Leu		Leu	Ala	He	He		Glu	Ala	Val	Asn	
385					390					395					400
Pro	Va]	Asp	His		Ser	Leu	He	Leu		Val	Asp	Trp	Leu		Asp
				405					410					415	
Arg	Ser	Cys		Val	Leu	Asn	Val		G1 y	Лsp	Ala	Leu		Ala	Gly
			420					425		_		_	430		
Leu	Leu		Asn	Tyr	Val	Asp		Thr	Glu	Ser	Arg		Thr	GIu	Pro
		435					440					445			

<210> 3034

<211> 675

<212> PRT

<213> Homo sapiens

<400> 3034

Met Arg Pro Leu Arg Pro Arg Ala Ala Leu Leu Ala Leu Leu Ala Ser

1 5 10 15

Leu Leu Ala Ala Pro Pro Val Ala Pro Ala Glu Ala Pro His Leu Val

20 25 30

His Val Asp Ala Ala Arg Ala Leu Trp Pro Leu Arg Arg Phe Trp Arg 35 40 45

Ser Thr Gly Phe Trp Gly Ser Thr Gly Arg Gly Leu Ser Tyr Asn Phe
50 55 60

Thr His Leu Asp Gly Tyr Leu Asp Leu Leu Arg Glu Asn Gln Leu Leu 65 70 75 80

Pro Gly Phe Glu Leu Met Gly Ser Ala Ser Gly His Phe Thr Asp Phe 85 90 95

Glu Asp Lys Gln Gln Val Phe Glu Trp Lys Asp Leu Val Ser Ser Leu 100 105 110

Ala Arg Arg Tyr Ile Gly Arg Tyr Gly Leu Ala His Val Ser Lys Trp 115 120 125

Asn Phe Glu Thr Trp Asn Glu Pro Asp His His Asp Phe Asp Asn Val 130 135 140

Ser Met Thr Met Gln Gly Phe Leu Asn Tyr Tyr Asp Ala Cys Ser Glu 145 150 155 160

Gly Leu Arg Ala Ala Ser Pro Ala Leu Arg Leu Gly Gly Pro Gly Asp 165 170 175

Ser	Phe	His	Thr	Pro	Pro	۸rg	Ser	Pro	Leu	Ser	Trp	Gly	Leu	Leu	Arg
			180					185					190		
His	Cys	His	Asp	Gly	Thr	Asn	Phe	Phe	Thr	Gly	Glu	Ala	Gly	Val	Arg
		195					200					205			
Leu	Asp	Tyr	lle	Ser	Leu	His	Arg	Lys	Val	Arg	Pro	Ala	Pro	Pro	Ser
	210					215					220				
Ala	Pro	Val	Phe	Cys	Ala	Leu	Ser	Arg	Cys	Ala	Pro	Gly	Arg	Ala	Asp
225					230					235					240
Pro	Gly	Gly	Ala	Glu	Ala	Ala	Pro	Pro	Ala	Gly	Cys	Ala	Gln	Leu	His
				245					250					255	
Leu	His	Pro	Gly	Ala	Gly	Glu	Gly	Arg	Arg	Ala	Ala	Asp	Pro	Ala	Ala
			260					265					270		
Leu	Pro	Gln	Val	Arg	Gly	His	Pro	His	Leu	Gln	Arg	Arg	Gly	Gly	Pro
		275					280					285			
Ala	Gly	Gly	Leu	Val	Pro	Ala	Thr	Ala	Val	Glu	Gly	Gly	Arg	Asp	Leu
	290					295					300				
Arg	Gly	His	Gly	Gly	Glu	Gly	Gly	Pro	Ala	Gln	Arg	Pro	Ala	Arg	Pro
305					310					315					320
Pro	Ala	Thr	Phe	Leu	Pro	Arg	Arg	Asp	Arg	Arg	Ala	Val	Ala	Ala	Pro
				325					330					335	
Pro	Gly	Pro	Ser	Cys	Pro	Gly	His	Pro	Gln	Val	lle	Ala	Gln	His	Gln
			340					345					350		
Asn	Leu	Leu	Leu	Ala	Asn	Thr	Thr	Ser	Ala	Phe	Pro	Tyr	Ala	Leu	Leu
		355					360					365			
Ser	Asn	Asp	Asn	Ala	Phe	Leu	Ser	Tyr	His	Pro	His	Pro	Phe	Ala	Gln
	370					375					380				
Arg	Thr	Leu	Thr	Ala	Arg	Phe	Gln	Val	Asn	Asn	Thr	Arg	Pro	Pro	His
385					390					395					400
Val	Gln	Leu	Leu	Arg	Lys	Pro	Val	Leu	Thr	Ala	Met	Gly	Leu	Leu	Ala
				405					410					415	
Leu	Leu	Asp	Glu	Glu	Gln	Leu	Trp	Ala	Glu	Val	Ser	Gln	Ala	Gly	Thr
			420					425					430		
Val	Leu	Asp	Ser	Asn	His	Thr	Val	Gly	Val	Leu	Ala	Ser	Ala	His	Arg
		435					440					445			
Pro	Gln	Gly	Pro	Ala	Asp	Ala	Trp	Arg	Ala	Ala	Val	Leu	He	Tyr	Ala
	450					455					460				

Ser Asp Asp Thr Arg Ala His Pro Asn Arg Ser Val Ala Val Thr Leu Arg Leu Arg Gly Val Pro Pro Gly Pro Gly Leu Val Tyr Val Thr Arg Tyr Leu Asp Asn Gly Leu Cys Ser Pro Asp Gly Glu Trp Arg Arg Leu Gly Arg Pro Val Phe Pro Thr Ala Glu Gln Phe Arg Arg Met Arg Ala Ala Glu Asp Pro Val Ala Ala Ala Pro Arg Pro Leu Pro Ala Gly Gly Arg Leu Thr Leu Arg Pro Ala Leu Arg Leu Pro Ser Leu Leu Leu Val His Val Cys Ala Arg Pro Glu Lys Pro Pro Gly Gln Val Thr Arg Leu Arg Ala Leu Pro Leu Thr Gln Gly Gln Leu Val Leu Val Trp Ser Asp Glu His Val Gly Ser Lys Cys Leu Trp Thr Tyr Glu Ile Gln Phe Ser Gln Asp Gly Lys Ala Tyr Thr Pro Val Ser Arg Lys Pro Ser Thr Phe Asn Leu Phe Val Phe Ser Pro Asp Thr Gly Ala Val Ser Gly Ser Tyr Arg Val Arg Ala Leu Asp Tyr Trp Ala Arg Pro Gly Pro Phe Ser Asp Pro Val Pro Tyr Leu Glu Val Pro Val Pro Arg Gly Pro Pro Ser Pro Gly Asn Pro

<210> 3035

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3035

Met	His	Ser	Ser	Ser	Phe	Arg	Phe	Val	Asn	lle	Trp	Pro	Ala	Leu	Phe
ł				5					10					15	
Phe	Ala	Pro	Arg	Ser	Val	Val	Arg	Arg	Ala	Ala	Ser	Leu	Leu	Ser	Lys
			20					25					30		
Val	Val	Asp	Ser	Leu	Ala	Pro	Ser	Пe	Thr	Asn	Val	Leu	Val	Gln	Gly
		35					40					45			
Lys	Gln	Val	Thr	Leu	G1y	Ala	Phe	Gly	His	Glu	Glu	Glu	Val	He	Ser
	50					55					60				
Asn	Pro	Leu	Ser	Pro	Arg	Val	He	Gln	Asn	He	lle	Tyr	Tyr	Lys	Cys
65					70					75					80
Asn	Thr	His	Asp		Arg	Glu	Ala	Val		Gln	Gln	Glu	Leu		He
				85					90					95	
His	He	Gly		He	He	Ser	Asn		Pro	Glu	Leu	Phe		Gly	Met
-			100	7.1	6.1			105				6.1	110	0.1	
Leu	Lys		Arg	He	Gly	Trp		He	His	Ala	Met		Tyr	Glu	Leu
C1	11.	115	C1	C1	Δ	1	120	41 -	l	A ÷	1	125	C1	I	C
GIN		Arg	GIŸ	Gly	Asp		Pro	Ala	Leu	Asp		lyr	GIN	Leu	Ser
Dno	130	Clu	Vo.1	Lva	Gln	135	Lou	Lou	Aan	11.	140	Cln	Duo	Cln	Cln
145	361	oru	vai	Lys	150	Leu	Leu	Leu	nsp	155	Leu	OIII	110	OIII	160
	G1 v	Arg	Cvs	Trn	Leu	Asn	Ara	Ara	Gln		Asn	Glv	Ser	Leu	
non	01)	ni g	0,3	165	Lcu	поп	т 5		170	110	пэр	01,	001	175	71311
Arg	Thr	Pro	Thr		Phe	Tvr	Asp	Arg		Trp	Gln	He	Leu		Arg
0			180	5			,,,,	185					190		0
Thr	Pro	Asn		lle	lle	Va]	Ala		Lys	His	Leu	Pro		Gln	Pro
		195	•				200	·	-			205			
Thr	Leu	Ser	Asp	Met	Thr	Met	Tyr	Glu	Met	Asn	Phe	Ser	Leu	Leu	Val
	210					215					220				
Glu	Asp	Thr	Leu	Gly	Asn	He	Asp	Gln	Pro	Gln	Tyr	Arg	Gln	Ile	Val
225					230					235					240
Val	Glu	Leu	Leu	Met	Val	Val	Ser	lle	Val	Leu	Glu	Arg	Asn	Pro	Glu
				245					250					255	
Leu	Glu	Phe	Gln	Asp	Lys	Val	Asp	Leu	Asp	Arg	Leu	Val	Lys	Glu	Ala
			260					265					270		
Phe	Asn	Glu	Phe	Gln	Lys	Asp	Gln	Ser	Arg	Leu	Lys	Glu	He	Glu	Lys
		275					280					285			

<210> 3036

<211> 578

<212> PRT

<213> Homo sapiens

<400> 3036

Met Gly Asp Ser Pro Gly Arg Gly Ala Pro Glu Arg Arg His Lys Ala

1 5 10 15

Gln Pro Gly Arg Ala Arg Lys Tyr Glu Trp Arg Pro Glu Gly Pro Thr

20 25 30

Ser Met Gly Ser Leu Gly Gln Arg Glu Asp Leu Gln Asp Glu Asp Arg
35 40 45

Asn Ser Ala Phe Thr Trp Lys Val Gln Ala Asn Asn Arg Ala Tyr Asn 50 55 60

Gly Gln Phe Lys Glu Lys Val lle Leu Cys Trp Gln Arg Lys Lys Tyr 65 70 75 80

Lys Thr Asn Val Ile Arg Thr Ala Lys Tyr Asn Phe Tyr Ser Phe Leu 85 90 95

Pro Leu Asn Leu Tyr Glu Gln Phe His Arg Val Ser Asn Leu Phe Phe 100 105 110

Leu Ile Ile Ile Leu Gln Ser Ile Pro Asp Ile Ser Thr Leu Pro 115 120 125

Trp Phe Ser Leu Ser Thr Pro Met Val Cys Leu Leu Phe lle Arg Ala 130 135 140

Thr Arg Asp Leu Val Asp Asp Met Gly Arg His Lys Ser Asp Arg Ala
145 150 155 160

lle Asn Asn Arg Pro Cys Gln lle Leu Met Gly Lys Ser Phe Lys Gln

170

175

Lys	Lys	Trp	Gln 180	Asp	Leu	Cys	Val	Gly 185	Asp	Val	Val	Cys	Leu 190	Arg	Lys
Asn	Asn	He		Pro	Ala	Asn	Met		Leu	Len	Ala	Ser		Glu	Pro
,		195					200	,,,,,		200		205			
Ser	Ser		Cvs	Tyr	Val	Glu		Val	Asp	He	Asp		Glu	Thr	Asn
	210	.,,	٠,	- , -		215					220	92,			
Leu		Phe	Arg	Gln	Ala		Met	Val	Thr	His		Glu	Leu	Ala	Thr
225	, .				230					235					240
	Lvs	Lvs	Met	Ala		Phe	G1n	G1 v	Thr		Thr	Cvs	Glu	Ala	
	, -	-,-		245				,	250			-,-		255	
Asn	Ser	Arg	Met	His	His	Phe	Val	Gly		Leu	Glu	Trp	Asn		Lys
			260					265	•			•	270	•	·
Lys	Tyr	Ser	Leu	Asp	He	Gly	Asn	Leu	Leu	Leu	Arg	Gly	Cys	Arg	lle
		275					280					285			
Arg	Asn	Thr	Asp	Thr	Cys	Tyr	Gly	Leu	Val	He	Tyr	Ala	Gly	Phe	Asp
	290					295					300				
Thr	Lys	He	Met	Lys	Asn	Cys	Gly	Lys	Πe	His	Leu	Lys	Arg	Thr	Lys
305					310					315					320
Leu	Asp	Leu	Leu	Met	Asn	Lys	Leu	Val	Val	Val	Ile	Phe	11e	Ser	Val
				325					330					335	
Val	Leu	Val	Cys	Leu	Val	Leu	Ala	Phe	Gly	Phe	Gly	Phe	Ser	Val	Lys
			340					345					350		
Glu	Phe	Lys	Asp	His	His	Tyr	Tyr	Leu	Ser	Gly	Val	His	Gly	Ser	Ser
		355					360					365			
Val	Ala	Ala	Glu	Ser	Phe	Phe	Val	Phe	Trp	Ser	Phe	Leu	He	Leu	Leu
	370					375					380				
	Val	Thr	He	Pro		Ser	Met	Phe	He		Ser	Glu	Phe	lle	-
385			_		390					395				_	400
Leu	Gly	Asn	Ser	Val	Phe	He	Asp	Trp		Val	GIn	Met	Tyr		Lys
D	C.1		v. i	405 D	, 1		. 1		410	T	C	,		415	
Pro	GIN	Asp		Pro	Ala	Lys	Ala		Ser	Ihr	Ser	Leu		Asp	HIS
	C1	C1	420	C 1	т	11.	DI	425	Α	1	Tl	C1	430	1	ть
Leu	Oly	0111	v al I	Glu	ΙΫĴ	116	гие	ser	nsp	LyS	1111	оту	HIL	Leu	1111,
		435					440					445			
Gln	Asn		Leu	Thr	Phe	Asn		Cvs	Cvs	He	Ser		Arg	Val	Tvr
						1	7	~	~ , ~			~ . ·	0		

450 455 460 Gly Ala Ala Pro Thr Pro Glu Leu Pro Ala Gly Ser Ser Ile Phe Lys 470 475 480 Gly Leu Arg Val Pro Glu Asn Gln Ser His Val Trp Pro His Ala Gln 485 490 His Leu Arg Pro Asn Leu Asn Gln Gly Thr Val Ala Arg Trp Pro Gly 505 Phe Leu Trp Arg Gly Pro Gly Lys Phe Phe Phe Leu Arg Gln Ser 515 520 525 Leu Thr Leu Ser Thr Gln Ala Gly Val Gln Trp Cys Asn Leu Gly Ser 535 540 Leu Gln Ser Pro Pro Pro Gly Phe Arg Arg Phe Ser Trp Leu Ser Leu 550 555 Pro Ser Gly Trp Asp Tyr Arg His Leu Pro Pro His Leu 11e Phe Leu 565 570 575 Tyr Phe

<210> 3037

<211> 409

<212> PRT

<213> Homo sapiens

<400> 3037

Met Gln Val Thr Leu Lys Thr Leu Gln Gln Gln Thr Phe Lys lle Asp

1 5 10 15

lle Asp Pro Glu Glu Thr Val Lys Ala Leu Lys Glu Lys lle Glu Ser

20 25 30

Glu Lys Gly Lys Asp Ala Phe Pro Val Ala Gly Gln Lys Leu lle Tyr 35 40 45

Ala Gly Lys IIe Leu Asn Asp Asp Thr Ala Leu Lys Glu Tyr Lys IIe 50 55 60

Asp Glu Lys Asn Phe Val Val Val Met Val Thr Lys Pro Lys Ala Val
65 70 75 80

Ser Thr Pro Ala Pro Ala Thr Thr Gln Gln Ser Ala Pro Ala Ser Thr

				85					90					95	
Thr	Λla	Val	Thr	Ser	Ser	Thr	Thr	Thr	Thr	Val	Ala	Gln	Ala	Pro	Thr
			100					105					110		
Pro	Val	Pro	Ala	Leu	Ala	Pro	Thr	Ser	Thr	Pro	Ala	Ser	11e	Thr	Pro
		115					120					125			
Ala	Ser	Ala	Thr	Ala	Ser	Ser	Glu	Pro	Ala	Pro	Ala	Ser	Ala	Ala	Lys
	130					135					140				
Gln	G1u	Lys	Pro	Ala	Glu	Lys	Pro	Ala	Glu	Thr	Pro	Val	Ala	Thr	Ser
145					150					155					160
Pro	Thr	Ala	Thr	Asp	Ser	Thr	Ser	Gly	Asp	Ser	Ser	Arg	Ser	Asn	Leu
				165					170					175	
Phe	Glu	Asp	Ala	Thr	Ser	Ala	Leu	Val	Thr	G1 y	Gln	Ser	Tyr	Glu	Asn
			180					185					190		
Met	Val	Thr	Glu	He	Met	Ser		G1 y	Tyr	Glu	Arg		Gln	Val	He
		195				DI	200		Б			205	., 1	0.1	
Ala		Leu	Arg	Ala	Ser		Asn	Asn	Pro	Asp	_	Ala	Val	Glu	Tyr
,	210		C1	7.1	D	215			C1	C	220	4.1	V 1	17 1	
	Leu	Met	GIÀ	116		GIY	Asp	Arg	Glu		GIN	Ala	vai	vai	
225 Pro	Dro	Gln	Δla	Ala	230 Sor	The	Clv	Ala	Pro	235	Sor	Sor	Ala	Val	240
110	110	OIII	ма	245	361	1111	01 y	ліа	250	0111	261	361	пта	255	МІа
Ala	Ala	Ala	Ala		Thr	Thr	Ala	Thr		The	Thr	Thr	Ser		Glv
,,,,	.110		260				11.1 G	265					270	50.	01,
Gly	His	Pro		Glu	Phe	Leu	Arg		Gln	Pro	Gln	Phe		Gln	Met
•		275					280					285			
Arg	Gln	lle	Пe	Gln	Gln	Asn	Pro	Ser	Leu	Leu	Pro		Leu	Leu	Gln
	290					295					300				
Gln	He	Gly	Arg	Glu	Asn	Pro	Gln	Leu	Leu	Gln	Gln	He	Ser	Gln	His
305					310					315					320
Gln	Glu	His	Phe	11e	Gln	Met	Leu	Asn	G] u	Pro	Val	Gln	Glu	Ala	Gly
				325					330					335	
Gly	G1n	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ser	Gly	Gly	11e	Ala	Glu	Ala
			340					345					350		
Gly	Ser	Gly	His	Met	Asn	Tyr	11e	Gln	Val	Thr	Pro	Gln	Glu	Lys	Glu
		355					360					365			

<210> 3038

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3038 Met Pro Ser Ala Lys Gln Arg Gly Ser Lys Gly Gly His Gly Ala Ala 10 Ser Pro Ser Glu Lys Gly Ala His Pro Ser Gly Gly Ala Asp Asp Val 25 Ala Lys Lys Pro Pro Pro Ala Ala Phe Ser Gly Trp Cys Val His His 40 35 45 Val Leu Glu Glu Val Gln Gln Val Arg Arg Ser His Gln Asp Phe Ser 55 60 Arg Gln Arg Glu Glu Leu Gly Gln Gly Leu Gln Gly Val Glu Gln Lys 70 75 65 Val Gln Ser Leu Gln Ala Thr Phe Gly Thr Phe Glu Ser 11e Leu Arg 85 90 Ser Ser Gln His Lys Gln Asp Leu Thr Glu Lys Ala Val Lys Gln Gly 105

Glu Ser Glu Val Ser Arg lle Ser Glu Val Leu Gln Lys Leu Gln Asn
115
120
125
Clu Lle Leu Lys Asp Leu Ser Asp Cly Lle His Val Lys Asp Ale

Glu lle Leu Lys Asp Leu Ser Asp Gly lle His Val Val Lys Asp Ala 130 135 140

Arg Glu Arg Asp Phe Thr Ser Leu Glu Asn Thr Val Glu Glu Arg Leu 145 150 155 160

Thr Glu Leu Thr Lys Ser lle Asn Asp Asn lle Ala lle Phe Thr Glu 165 170 175

Val	Gln	Lys	Arg	Ser	Gln	Lys	Glu	He	Asn	Asp	Met	Lys	Ala	Lys	Val
			180					185					190		
Ala	Ser	Leu	Glu	Glu	Ser	Glu	Gly	Asn	Lys	Gln	Asp	Leu	Lys	Ala	Leu
		195					200					205			
Lys	Glu	Ala	Val	Lys	Glu	He	G] n	Thr	Ser	Ala	Lys	Ser	Arg	Glu	Trp
	210					215					220				
Asp	Met	Glu	Ala	Leu	Arg	Ser	Thr	Leu	G1n	Thr	Met	Glu	Ser	Asp	He
225					230					235					240
Tyr	Thr	Glu	Val	Arg	Glu	Leu	Val	Ser	Leu	Lys	Gln	Glu	Gln	Gln	Ala
				245					250					255	
Phe	Lys	Glu		Ala	Asp	Thr	Glu		Leu	Ala	Leu	Gln	Ala	Leu	Thr
			260					265					270		
Glu	Lys		Leu	Arg	Ser	G] u		Ser	Va]	Ser	Arg		Pro	Glu	G] u
		275					280					285		_	
He		Arg	Leu	G]u	Glu		Leu	Arg	Gln	Leu		Ser	Asp	Ser	His
	290		0.7			295	n.				300				
	Pro	Lys	Glu	Asp		Gly	Phe	Arg	His		Glu	Ala	Phe	Glu	
305	0.1	0.1	,	6	310	61			0	315	,	61		., 1	320
Leu	GIn	GIn	Lys		GIn	GIy	Leu	Asp		Arg	Leu	GIn	His	Val	Glu
Aan	C1.,	Vol	Lan	325	Mot	Cln	Vol	110	330	Ala	A 22.00	Cln	Tha	335	Can
ASP	GIY	vai	340	361	met	GIII	vai	345	361	мла	мів	GIII	350	G1u	261
Lou	Clu	Sor		Lou	Sor	Lve	Sor		G1u	Hic	Clu	Gla		Leu	Ala
Leu	Olu	355	LCu	Leu	261	Lys	360	OIII	Olu	1113	Gra	365	ni g	1,cu	Ма
Ala	Len		Glv	Arg	Len	Glu		len	Glv	Ser	Ser		Ala	Asp	Gln
	370		O1,	6	200	375	01)	Bed	01,		380	010	1110	ПОР	0.111
Asp		Leu	Ala	Ser	Thr		Arg	Ser	Leu	Glv		Thr	Gln	Leu	Val
385	J				390					395					400
Leu	Tyr	Gly	Asp	Val	Glu	Glu	Leu	Lys	Arg	Ser	Va]	Gly	Glu	Leu	Pro
				405					410					415	
Ser	Thr	Val	Glu	Ser	Leu	Gln	Lys	Val	Gln	Glu	Gln	Val	Tyr	Thr	Leu
			420					425					430		
Leu	Ser	Gln	Asp	Gln	Ala	Gln	Ala	Ala	Arg	Leu	Pro	Pro	Gln	Asp	Phe
		435					440					445			
Leu	Asp	Arg	Leu	Ser	Ser	Leu	Asp	Asn	Leu	Lys	Ala	Ser	Val	Ser	Gln
	450					455					460				

<210> 3039

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3039

 Met Cys His Val Ile Val Thr Cys Arg Ser Met Leu Trp Thr Leu Leu
 1
 5
 10
 15

 Ser Ile Val Val Ala Phe Ala Glu Leu Ile Ala Phe Met Ser Ala Asp
 20
 25
 30

 Trp Leu Thr Gly Lys Ala Arg Ser Arg Gly Gly Val Glu Pro Ala Gly
 35
 40
 45

 Pro Gly Gly Gly Ser Pro Glu Pro Tyr His Pro Thr Leu Gly Ile Tyr
 50
 55
 60

 Ala Arg Cys Ile Arg Asn Pro Gly Val Gln His Phe Gln Arg Asp Thr

65 70 75 80 Leu Cys Gly Pro Tyr Ala Glu Ser Phe Gly Glu Ile Ala Ser Gly Phe

Leu Cys Gly Pro Tyr Ala Glu Ser Phe Gly Glu IIe Ala Ser Gly Phe
85 90 95

Trp Gln Ala Thr Ala IIe Phe Leu Ala Val Gly IIe Phe IIe Leu Cys 100 105 110

Met Val Ala Leu Val Ser Val Phe Thr Met Cys Val Gln Ser lle Met 115 120 125

Lys Lys Ser 11e Phe Asn Val Cys Gly Leu Leu Gln Gly 11e Ala Gly 130 135 140

Leu Phe Leu Ile Leu Gly Leu Ile Leu Tyr Pro Ala Gly Trp Gly Cys 145 150 155 160 Gln Lys Ala Ile Asp Tyr Cys Gly His Tyr Ala Ser Ala Tyr Lys Pro 170 Gly Asp Cys Ser Leu Gly Trp Ala Phe Tyr Thr Ala Ile Gly Gly Thr 180 185 190 Val Leu Thr Phe Ile Cys Ala Val Phe Ser Ala Gln Ala Glu Ile Ala 200 205 Thr Ser Ser Asp Lys Val Glu Glu Glu Glu Glu Glu Gly Lys Asn Leu 215 220 Ile Cys Leu Leu 225 <210> 3040 <211> 544 <212> PRT <213> Homo sapiens <400> 3040

Met Pro Pro Asn Leu Gly Asn Ala Gly Leu Leu Gly Arg Met Leu Asp 5 1 10 15 Glu Lys Thr Pro Pro Ser Pro Ser Gly Gln Pro Glu Glu Pro Gly Met 25 Val Arg Leu Val Cys Gly His His Asn Trp Ile Ala Val Ala Tyr Thr 35 40 45 Gln Phe Leu Val Cys Tyr Arg Leu Lys Glu Ala Ser Gly Trp Gln Leu 55 Val Phe Ser Ser Pro Arg Leu Asp Trp Pro Ile Glu Arg Leu Ala Leu 70 75 Thr Ala Arg Val His Gly Gly Ala Leu Gly Glu His Asp Lys Met Val 85 90 95

Ala Ala Ala Thr Gly Ser Glu lle Leu Leu Trp Ala Leu Gln Ala Glu 100 105 110

Gly Gly Ser Glu lle Gly Val Phe His Leu Gly Val Pro Val Glu 115 120 125

Ala Leu Phe Phe Val Gly Asn Gln Leu IIe Ala Thr Ser His Thr Gly
130 135 140

Arg	He	Gly	Val	Trp	Asn	Ala	Val	Thr	Lys	His	Trp	Gln	Val	Gln	Glu
145					150					155					160
Val	Gln	Pro	He	Thr	Ser	Tyr	Asp	Ala	Ala	Gly	Ser	Phe	Leu	Leu	Leu
				165					170					175	
Gly	Cys	Asn	Asn	Gly	Ser	He	Tyr	Tyr	Val	Asp	Val	Gln	Lys	Phe	Pro
			180					185					190		
Leu	Arg	Met	Lys	Asp	Asn	Asp	Leu	Leu	Val	Ser	Glu	Leu	Tyr	Arg	Asp
		195					200					205			
Pro	Ala	Glu	Asp	G1y	Val	Thr	Ala	Leu	Ser	Val	Tyr	Leu	Thr	Pro	Lys
	210					215					220				
Thr	Ser	Asp	Ser	Gly	Asn	Trp	He	Glu	Ile	Ala	Tyr	Gly	Thr	Ser	Ser
225					230					235					240
Gly	Gly	Val	Arg		lle	Val	Gln	His		Glu	Thr	Val	Gly	Ser	Gly
				245					250					255	
Pro	Gln	Leu		Gln	Thr	Phe	Thr		His	Arg	Ser	Pro		Thr	Lys
		_	260					265			_		270		
He	Met		Ser	Glu	Lys	His		He	Ser	Val	Cys		Asp	Asn	Asn
		275	 .	-			280					285			
His		Arg	Thr	Trp	Ser		Thr	Arg	Phe	Arg		Met	He	Ser	Thr
61	290 D	C1	C	TI	D	295	A 1	C	D)		300	,	4.1	,	6.1
	Pro	GIY	Ser	Inr		Leu	Ala	Ser	Phe		11e	Leu	Ala	Leu	
305	A 1 a	۸	C1	11: -	310	C1	C++-	C	A1 -	315	Λ	Λ	11.	C1	320
ser.	мта	Asp	Gry		GIY	Gry	Cys	ser		GIY	ASI	ASP	116	Gly	rro
Tur	Clv	Glu	Ara	325	Acn	Gln	Gln	Val	330 Pho	110	Gla	Lve	Val	335 Val	Dro
1 9 1	Uly	Olu	340	nsp	nsp	0111	0111	345	1116	116	0111	Lys	350	vai	110
Ser	Ala	Ser		Len	Phe	Val	Aro		Ser	Ser	Thr	Glv		Arg	Val
001	ma	355	OIII	Leu	1110	741	360	LCu	501	001	1111	365	0111	m g	101
Cvs	Ser		Arg	Ser	Val	Asp		Ser	Pro	Thr	Thr		Phe	Thr	Val
9,5	370		8			375		001			380				
Leu		Cvs	Glu	Glv	Ser		Arg	Leu	Glv	Ser		Pro	Arg	Arg	Tvr
385		•		·	390	Ü	Ü		,	395	J		Ü		400
	Leu	Thr	Gly	G1n	Ala	Asn	Gly	Ser	Leu	Ala	Met	Trp	Asp	Leu	
			-	405			٠		410			-	•	415	
Thr	Ala	Met	Asp	Gly	Leu	Gly	Gln	Ala	Pro	Ala	Gly	Gly	Leu	Thr	Glu
			420					425					430		

Gln Glu Leu Met Glu Gln Leu Glu His Cys Glu Leu Ala Pro Pro Ala 440 Pro Ser Ala Pro Ser Trp Gly Cys Leu Pro Ser Pro Ser Pro Arg Ile 450 455 460 Ser Leu Thr Ser Leu His Ser Ala Ser Ser Asn Thr Ser Leu Ser Gly-470 475 His Arg Gly Ser Pro Ser Pro Pro Gln Ala Glu Ala Arg Arg Arg Gly 485 490 Gly Gly Ser Phe Val Glu Arg Cys Gln Glu Leu Val Arg Ser Gly Pro 500 505 510 Asp Leu Arg Arg Pro Pro Thr Pro Ala Pro Trp Pro Ser Ser Gly Leu 520 525 Gly Thr Pro Leu Thr Pro Pro Lys Met Lys Leu Asn Glu Thr Ser Phe 530 535 540

<210> 3041

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3041

Met Asp Phe Ser Ala Pro Glu Leu Gln Leu Lys Pro Thr Arg Ala Ala 1 5 10 15

Thr His Arg Thr Thr Ser Phe Pro Pro Arg Arg Met Gln Trp Gly Trp
20 , 25 30

Leu Phe Gly Ser Leu His Ser Cys His Trp Leu Gly Arg Gln Pro Leu
35 40 45

Leu Ser Leu Lys Ala Val Val Ser Phe Arg Val Phe Ser Trp Lys Ser 50 55 60

Arg Arg Asn Ser Ser Leu Ile Arg Arg Trp Gly Pro Gly Gly Gly Ser
65 70 75 80

Gly lle Arg Gly Gln Ala Ala His Arg Ile Arg Λla Ser Leu Cys Pro 85 90 95

Pro Asp Ala Pro Trp Gly Glu Ser Ser Val

```
<211> 574
<212> PRT
<213> Homo sapiens
<400> 3042
Met Val Gly Glu Arg His Ala Gly Asp Leu Met Val Pro Leu Gly Pro
                  5
                                     10
                                                          15
Arg Leu Gln Ala Tyr Pro Glu Glu Leu Ile Arg Gln Arg Pro Gly His
                                 25
Asp Gly His Pro Glu Tyr Leu Ile Arg Trp Ser Val Leu Lys Cys Gly
        35
                             40
                                                  45
Glu Val Gly Lys Val Gly Val Glu Glu Gly Lys Ala Glu His Ile Leu
                         55
Met Trp Leu Ser Ala Pro Glu Val Tyr Ala Asn Cys Pro Gly Leu Leu
                     70
                                         75
Gly Glu Arg Ala Leu Ser Lys Gly Leu Gln His Glu Pro Ala Gly Val
                 85
                                     90
Ser Gly Ser Phe Pro Arg Asp Pro Gly Gly Leu Asp Glu Val Ala Met
                                105
Gly Glu Met Glu Ala Asp Val Gln Ala Leu Val Arg Arg Ala Ala Arg
                                                 125
        115
                            120
Gln Leu Ala Glu Ser Gly Thr Pro Ser Leu Thr Ala Ala Val Leu His
                        135
Thr Ile His Val Leu Ser Ala Tyr Ala Ser Ile Gly Pro Leu Thr Gly
                                        155
                    150
Val Phe Arg Glu Thr Gly Ala Leu Asp Leu Leu Met His Met Leu Cys
                165
                                     170
                                                         175
Asn Pro Glu Pro Gln Ile Arg Arg Ser Ala Gly Lys Met Leu Gln Ala
                                185
Leu Ala Ala His Asp Ala Gly Ser Arg Ala His Val Leu Leu Ser Leu
                            200
                                                 205
Ser Gln Gln Asp Gly 11e Glu Gln His Met Asp Phe Asp Ser Arg Tyr
```

<210> 3042

Thr	Leu	Leu	Glu	Leu	Phe	Ala	Glu	Thr	Thr	Ser	Ser	Glu	Glu	His	Cys
225					230					235					240
Met	Ala	Phe	Glu	Gly	He	His	Leu	Pro	Gln	He	Pro	Gly	Lys	Leu	Leu
				245					250					255	
Phe	Ser	Leu	Val	Lys	Arg	Tyr	Leu	Cys	Val	Thr	Ser	Leu	Leu	Asp	Gln
			260					265					270		
Leu	Asn	Ser	Ser	Pro	Glu	Leu	Gly	Ala	Gly	Asp	Gln	Ser	Ser	Pro	Cys
		275					280					285			
Ala	Thr	Arg	Glu	Lys	Ser	Arg	Gly	Gln	Arg	Glu	Leu	Glu	Phe	Ser	Met
	290					295					300				
Ala	Val	Gly	Asn	Leu	Ile	Ser	Glu	Leu	Val	Arg	Ser	Met	Gly	Trp	Ala
305					310					315					320
Arg	Asn	Leu	Ser	Glu	Gln	G1 y	Met	Ser	Pro	Pro	Arg	Pro	Thr	Arg	Ser
				325					330					335	
lle	Phe	Gln	Pro	Tyr	He	Ser	Gly	Pro	Ser	Leu	Leu	Leu	Pro	Thr	lle
			340					345					350		
Val	Thr	Thr	Pro	Arg	Arg	Gln	Gly	Trp	Val	Phe	Arg	Gln	Arg	Ser	Glu
		355					360					365			
Phe	Ser	Ser	Arg	Ser	Gly	Tyr	Gly	Glu	Tyr	Val	Gln	Gln	Thr	Leu	Gln
	370					375					380				
Pro	Gly	Met	Arg	Val	Arg	Met	Leu	Asp	Asp	Tyr	Glu	Glu	He	Ser	Ala
385					390					395					400
Gly	Asp	Glu	Gly	Glu	Phe	Arg	Gln	Ser	Asn	Asn	Gly	He	Pro	Pro	Val
				405					410					415	
Gln	Thr	Leu	G1 y	Glu	Lys	Ala	Leu	Gly	Glu	He	Ser	Val	Ser	Val	Glu
			420					425					430		
Met	Ala		Ser	Leu	Leu	Gln		Leu	Ser	Ser	Arg		Glu	Gly	Ser
		435					440					445			
Thr		Asn	Asp	Leu	Leu		Ser	Gln	He	Tyr		Lys	Tyr	Gly	Leu
	450					455					460				
	Ser	Asn	Glu	Pro		Ser	Ser	Ser	Thr		Arg	Asn	His	Ser	
465					470					475					480
Thr	Pro	Asp	Pro		Glu	Glu	Ser	Lys		Glu	Ala	Ser	Phe		Glu
				485					490				_	495	
Glu	Glu	Thr		Ser	Leu	Lys	Ala		Ala	Glu	Ala	Pro	Lys	Thr	Glu
			500					505					510		

Ala Glu Pro Thr Lys Thr Arg Thr Glu Thr Pro Met Ala Gln Ser Asp Ser Gln Leu Phe Asn Gln Leu Leu Val Thr Glu Gly Met Thr Leu Pro Thr Glu Met Lys Glu Ala Ala Ser Gly Glu Ser Gly Ser Gly Arg Lys Gln Leu Glu Gln Val Leu Gly Ser Leu Ser Arg Arg Asn Gly

<210> 3043

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3043 Met Val Arg Ala Arg Val Val Leu Pro Gly Arg Ser Cys Gly Arg Gly Gly Gly Val Cys Arg Val Gly Arg Cys Val Cys Ser Asp Thr Leu Val Leu Gly Ala Ala Gly His Ile Thr Gly Asp Met Pro Asn Gly Val Arg Gln Arg Ser Arg Val Ser Thr Val Glu Arg Pro Arg Trp Gln Gly Leu Pro Gly Val His Thr Ser Arg Cys Val Thr Arg Glu Gly Pro Met His Gly Ala Ser Ser Ser Cys lle Arg Gln Cys Arg lle Ser Pro Thr Val Cys Phe Leu Leu Arg Gln Arg Pro His Ala Cys Leu Leu Pro Pro Leu

Gln Val Lys Arg Ser Arg Ser Lys Gly Gly Leu Ala Gly Pro Asp Gly

Thr Lys Ser Val Phe Gly Gln Met Cys Ala Lys Met Ser Ser Phe Gly

Pro Asp Ser Leu Leu Pro His Arg Val Trp Lys Val Lys Phe Val Gly Glu Asn Leu Pro Arg Ala Gly Ala Pro Val Ser Pro Ala Val Val 165 170 175 Ala <210> 3044 <211> 100 <212> PRT <213> Homo sapiens <400> 3044 Met Ser Ile Asp Gln Arg Lys Lys Met Leu Lys Asn Leu Arg Asn Thr 1 10 15 Asn Tyr Asp Val Phe Glu Arg lle Cys Trp Gly Leu Gly lle Glu Tyr 20 25 Thr Phe Pro Pro Leu Tyr Tyr Arg Arg Ala His Arg Arg Phe Val Thr Lys Lys Ala Leu Cys Ile Arg Val Phe Gln Glu Thr Gln Lys Leu Lys 50 55 Lys Arg Arg Arg Ala Leu Lys Ala Ala Ala Ala Gln Lys Gln Ala 70 75 Lys Arg Arg Asn Pro Asp Ser Pro Ala Lys Ala 11e Pro Lys Thr Leu 90 95 Lys Asp Ser Gln 100 <210> 3045 <211> 109 <212> PRT <213> Homo sapiens <400> 3045

Met Gly Ile Ala Met Gly Pro Gly Ala Thr Arg Trp Thr Gln Gly Pro

10

15

5

His Ser Thr Thr Val Pro Cys Asp Ala Ala Leu Met Thr Ser Arg His 25 Gln Ser Trp Thr Pro Pro Gln Val Arg Ser Trp Ala Ser Tyr Gly Ser 45 Gly Pro Leu Ala His Asp Ile His Thr Val Trp Val Ser Ser Ser Pro 55 Pro His Pro Thr Asp Gln Val Gln Phe Glu Lys Cys Gly Lys Arg Val 70 75 Asp Arg Leu Asp Gln Arg Arg Ser Lys Leu Arg Val Ala Gly Gly His 85 90 95 Pro Gly Asn Ser Pro Trp Thr Val Ser Leu Gly Asn Arg 100 105

<210> 3046

<211> 491

<212> PRT

<213> Homo sapiens

<400> 3046

Met Met Ser Glu His Asp Leu Ala Asp Val Val Gln Ile Ala Val Glu 1 5 10 15

Asp Leu Ser Pro Asp His Pro Val Val Leu Glu Asn His Val Val Thr
20 25 30

Asp Glu Asp Glu Pro Ala Leu Lys Arg Gln Arg Leu Glu Ile Asn Cys 35 40 45

Gln Asp Pro Ser Ile Lys Ser Phe Leu Tyr Ser Ile Asn Gln Thr Ile 50 55 60

Cys Leu Arg Leu Asp Ser Ile Glu Ala Lys Leu Gln Ala Leu Glu Ala 65 70 75 80

Thr Cys Lys Ser Leu Glu Glu Lys Leu Asp Leu Val Thr Asn Lys Gln
85 90 95

His Ser Pro 11e Gln Val Pro Met Val Ala Gly Ser Pro Leu Gly Ala 100 105 110

Thr Gln Thr Cys Asn Lys Val Arg Cys Ala Val Pro Gly Arg Arg Gln
115 120 125

Asn		11e	vai	val	Lys		rro	оту	GIN	GIU		ser	nis	H1S	GIU
	130	0.1	-	0.7		135					140				0.1
-	GIy	Glu	Ser	Gly		Glu	Ala	Ser	Asp		Val	Ser	Ser	Cys	
145					150					155					160
Gln	Ala	Gly	Ser		Ser	He	Gly	Ser		Val	Thr	Leu	lle	Thr	Leu
				165					170					175	
Asn	Ser	Glu	Glu	Asp	Tyr	Pro	Asn	G1 y	Thr	Trp	Leu	Gly	Asp	Glu	Asn
			180					185					190		
Asn	Pro		Met	Arg	Val	Arg	Cys	Ala	He	lle	Pro	Ser	Asp	Met	Leu
		195					200					205			
His	He	Ser	Thr	Asn	Cys	Arg	Thr	Ala	Glu	Lys	Met	Ala	Leu	Thr	Leu
	210					215					220				
Leu	Asp	Tyr	Leu	Phe	His	Arg	Glu	Val	Gln	Ala	Val	Ser	Asn	Leu	Ser
225					230					235					240
Gly	Gln	Gly	Lys	His	Gly	Lys	Lys	Gln	Leu	Asp	Pro	Leu	Thr	He	Tyr
				245					250					255	
Gly	lle	Arg	Cys	His	Leu	Phe	Tyr	Lys	Phe	Gly	He	Thr	Glu	Ser	Asp
			260					265					270		
Trp	Tyr	Arg	He	Lys	Gln	Ser	He	Asp	Ser	Lys	Cys	Arg	Thr	Ala	Trp
		275					280					285			
Arg	Arg	Lys	Gln	Arg	Gly	Gln	Ser	Leu	Ala	Val	Lys	Ser	Phe	Ser	Arg
	290					295					300				
Arg	Thr	Pro	Asn	Ser	Ser	Ser	Tyr	Cys	Pro	Ser	Glu	Pro	Met	Met	Ser
305					310					315					320
Thr	Pro	Pro	Pro	Ala	Ser	Glu	Leu	Pro	Gln	Pro	Gln	Pro	Gln	Pro	Gln
				325					330					335	
Ala	Leu	His	Tyr	Ala	Leu	Ala	Asn	Ala	Gln	Gln	Val	Gln	lle	His	Gln
			340					345					350		
11e	Gly	Glu	Asp	Gly	Gln	Val	Gln	Val	Пe	Pro	Gln	Gly	His	Leu	His
		355					360					365			
Пе	Ala	Gln	Val	Pro	Gln	Gly	Glu	Gln	Va]	Gln	He	Thr	Gln	Asp	Ser
	370					375					380				
Glu	Gly	Asn	Leu	Gln	He	His	His	Val	Gly	Gln	Asp	Gly	Gln	Leu	Leu
385					390					395					400
Glu	Ala	Thr	Arg	He	Pro	Cys	Leu	Leu	Ala	Pro	Ser	Val	Phe	Lys	Ala

Ser Ser Gly Gln Val Leu Gln Gly Ala Gln Leu Ile Ala Val Ala Ser Ser Asp Pro Ala Ala Ala Gly Val Asp Gly Ser Pro Leu Gln Gly Ser Asp lle Gln Val Gln Tyr Val Gln Leu Ala Pro Val Ser Asp His Thr Ala Gly Ala Gln Thr Ala Glu Ala Leu Gln Pro Thr Leu Gln Pro Glu Met Gln Leu Glu His Gly Ala Ile Gln Ile Gln

<210> 3047

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3047

Met Ala Met Ala His Ala Gly Leu Cys Gly Trp Arg Gly Glu Val Ser Leu Asp Ser Arg Glu Lys Pro Trp Gly Asn Pro Lys Gly Leu Arg Lys Thr Gly 11e Gly Val Arg His Glu Gly Arg Glu Ser Leu Gly Lys Thr Gly Arg Ala Val Arg Ser Pro Glu Gly Ser Cys Gly Cys Ser Ala Ala Gly Arg Pro Arg Leu Ala Pro Pro Arg Arg Trp Ala Ser Pro Pro Gly Ala His Pro Arg Ala Ala Ala Phe Leu His Ala Ala Gln Gly Ser Ser Met Pro Gly Ala Gly Met Arg Gln Arg Phe Cys Ser Leu Leu Ala Ile Leu Ala Ser Pro Asn Glu Arg Ala Leu Lys Met Lys Leu Leu lle Asn

Ser Arg Val Arg Asn Ser Gly Leu Cys Gly Lys Gly Arg Ala Leu His

Phe Val Ser Asn Arg <210> 3048 <211> 232 <212> PRT <213> Homo sapiens <400> 3048 Met Gly Leu Met Leu Thr Ile Pro Leu Ser Asn Arg Ser Phe Met Pro Asn Leu Val Pro Pro Lys Ile Pro Asp Gly Glu Arg Val Asp Phe Asp Asp lle His Gly Lys Arg Thr Glu Lys Asp Leu Asn Glu Leu Gln Ala Leu Ile Glu Ala His Phe Glu Asn Arg Lys Lys Glu Glu Glu Glu Leu Val Ser Leu Lys Asp Arg Ile Glu Arg Arg Arg Ala Glu Arg Ala Glu Gln Gln Arg lle Arg Asn Glu Arg Glu Lys Glu Arg Gln Asn Arg Leu Ala Glu Glu Arg Ala Arg Arg Glu Glu Glu Glu Asn Arg Arg Lys Ala Glu Asp Glu Ala Arg Lys Lys Ala Leu Ser Asn Met Met His Phe Gly Gly Tyr lle Gln Lys Gln Ala Gln Thr Glu Arg Lys Ser Gly Lys Arg Gln Thr Glu Arg Glu Lys Lys Lys Lys 11e Leu Ala Glu Arg Arg Lys Val Leu Ala lle Asp His Leu Asn Glu Asp Gln Leu Arg Glu Lys Ala Lys Glu Leu Trp Gln Ser IIe Tyr Asn Leu Glu Ala Glu Lys Phe

Asp Leu Gln Glu Lys Phe Lys Gln Gln Lys Tyr Glu Ile Asn Val Leu

Arg Asn Arg lle Asn Asp Asn Gln Lys Val Ser Lys Thr Arg Gly Lys Ala Lys Val lle Gly Arg Trp Lys <210> 3049 <211> 496 <212> PRT <213> Homo sapiens <400> 3049 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly 5 . Val Gln Ser Gln Glu Gln Leu Leu Gln Ser Ala Thr Glu Val Lys Gln Pro Gly Asp Ser Val Lys Val Ser Cys Arg Ala Ser Glu Asp Thr Phe Thr Ser Ser Tyr Phe His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Ile 11e Asn Pro Gly Gly Gly Arg Thr Asn Tyr Ala Gln Lys Phe Gln Asp Arg Val Thr Met Thr Trp Asp Met Ser Ser Gly Thr Val Tyr Met Glu Leu Asp 11e Leu Thr Ser Gln Asp Thr Ala Val Tyr Phe Cys Ala Lys Ser Arg Gly Gly Tyr Tyr Asp Ala Glu Asp Asn Trp Phe Asp Pro Trp Gly Leu Gly Thr Gln Val Ile Val Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr Gln Pro Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe Pro

Gln Glu Ser Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val Thr

			180					185					190		
Ala	Arg	Asn	Phe	Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly	Asp	Leu	Tyr	Thr
		195					200					205			
Thr	Ser	Ser	G1n	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys	Leu	Ala	Gly	Lys
	210					215					220				
Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro	Ser	Gln	Asp	Val
225					230					235					240
Thr	Val	Pro	Cys	Pro	Val	Pro	Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser
				245					250					255	
Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser	Cys	Cys	His	Pro	Arg	Leu	Ser	Leu
			260					265					270		
His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu	Leu	Gly	Ser	Glu	Ala	Asn	Leu
		275					280					285			
Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp	Ala	Ser	Gly	Val	Thr	Phe	Thr
	290					295					300				
Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala	Val	Gln	Gly	Pro	Pro	Glu	Arg
305					310					315					320
Asp	Leu	Cys	Gly	Arg	Tyr	Ser	Val	Ser	Ser	Val	Leu	Pro	Gly	Cys	Ala
				325					330					335	
Glu	Pro	Trp	Asn	His	Gly	Lys	Thr	Phe	Thr	Cys	Thr	Ala	Ala	Tyr	Pro
			340					345					350		
Glu	Ser	Lys	Thr	Pro	Leu	Thr	Ala	Thr	Leu	Ser	Lys	Ser	Gly	Asn	Thr
		355					360					365			
Phe	Arg	Pro	Glu	Val	His	Leu	Leu	Pro	Pro	Pro	Ser	Glu	Glu	Leu	Ala
	370					375					380				
Leu	Asn	Glu	Leu	Val	Thr	Leu	Thr	Cys	Leu	Ala	Arg	Gly	Phe	Ser	Pro
385					390					395					400
Lys	Asp	Val	Leu		Arg	Trp	Leu	Gln	Gly	Ser	G]n	Glu	Leu		Arg
				405					410					415	
Glu	Lys	Tyr		Thr	Trp	Ala	Ser		Gln	Glu	Pro	Ser		Gly	Thr
			420					425					430		
Thr	Thr		Ala	Val	Thr	Ser		Leu	Arg	Va1	Ala		Glu	Asp	Trp
	,	435		701	101		440	1.0				445			р
Lys		Gly	Asp	Thr	Phe	Ser	Cys	Met	Val	Gly		Glu	Ala	Leu	Pro
	450	DI.	TI	61	,	455	3.1				460	61	,	D	T)
Leu	Ala	Phe	Ihr	GID	LVC	Thr	110	ASD	Aro	1.60	ALA	(T V	I V S	Pro	lhr

His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr <210> 3050 <211> 546 <212> PRT <213> Homo sapiens <400> 3050 Met Asp Leu Arg Ala Cys Lys Glu Leu Arg Pro Phe Ser Asn Pro Glu Leu Gly Leu Arg Asp Ala Leu Gln Cys Leu Asn Ser Ser Asp Trp Gln Met Lys Glu Lys Gly Leu Val Ser lle Gln Arg Leu Ala Ala Cys His Ser Glu Val Leu Thr Gly Lys Leu His Asp Val Cys Leu Val Val Thr Gly Glu Val Thr Asn Leu Arg Ser Lys Val Ser His Leu Ala Ile Ser Thr Leu Gly Asp Leu Phe Gln Ala Leu Lys Lys Asn Met Asp Gln Glu Ala Glu Glu Ile Ala Arg Cys Leu Leu Gln Lys Met Ala Asp Thr Asn Glu Phe Ile Gln Arg Ala Ala Gly Gln Ser Leu Arg Ala Met Val Glu Asn Val Thr Leu Ala Arg Ser Leu Val Val Leu Thr Ser Ala Gly Val Tyr His Arg Asn Pro Leu IIe Arg Lys Tyr Ala Ala Glu His Leu Ser Ala Val Leu Glu Gln lle Gly Ala Glu Lys Leu Leu Ser Gly Thr Arg

Asp Ser Thr Asp Met Leu Val His Asn Leu Val Arg Leu Ala Gln Asp

Ser Asn Gln Asp Thr Arg Phe Tyr Gly Arg Lys Met Val Asn 11e Leu

		195					200					205			
Met	Ala	Asn	Thr	Lys	Phe	Asp	Ala	Phe	Leu	Lys	Gln	Ser	Leu	Pro	Ser
	210					215					220				
Tyr	Asp	Leu	G1n	Lys	Val	Met	Ala	Ala	lle	Lys	Gln	Gln	Gly	He	Glu
225					230					235					240
Asp	Asn	Asp	Glu	Leu	Pro	Ser	Ala	Lys	Gly	Cys	Lys	Val	Leu	Arg	Ser
				245					250					255	
Leu	Val	Val	Cys	Glu	Asn	Gly	Leu	Pro	He	Lys	Glu	Gly	Leu	Ser	Cys
			260					265					270		
Asn	Gly	Pro	Arg	Leu	Val	G] y	Leu	Arg	Ser	Thr	Leu	Gln	Gly	Arg	Gly
		275					280					285			
Glu	Met	Val	Glu	Gln	Leu	Arg	Glu	Leu	Thr	Arg	Leu	Leu	Glu	Ala	Lys
	290					295					300				
Asp	Phe	Arg	Ser	Arg	Met	Glu	Gly	Val	Gly		Leu	Leu	Glu	Leu	
305					310					315					320
Lys	Ala	Lys	Thr		Leu	Val	Thr	Ala	His	Leu	Val	Gln	Val		Asp
				325					330					335	_
Ala	Phe	Thr		Arg	Leu	Gln	Asp		Asn	Lys	Lys	Val		Gln	Trp
	_		340					345					350		,
Ala	Leu		Ser	Phe	Ala	Lys		He	Pro	Leu	Leu		Glu	Ser	Leu
	Б	355				7.7	360	7.7	Tr.			365		,	
His		Met	Leu	Leu	Ser		He	He	Thr	Val		Asp	Asn	Leu	Asn
C	370		C	C1	7.1	375	41.	4.1	41.	W. 1	380	V - 1	1	Δ	A 1 -
	Lys	Asn	Ser	GIY		lyr	Ala	Ala	Ala		Ата	vaı	Leu	Asp	
385	V = 1	Cl.,	Can	Lan	390	Aan	ارما	Cva	Lan	395	Duo	Ala	Lau	110	400
Met	vai	Glu	261	405	wsb	ASII	Leu	Cys	Leu 410	Leu	110	ма	Leu	415	O1 y
Ara	Val	Ara	Pho		Sor	Clv	Ara	Δla	Val	Lou	Aen	Val	Thr		Ara
AI g	vai	AI g	420	Leu	Jei	Gry	AI g	425	vai	Leu	nəp	101	430	пър	Mg
Lou	Δla	Val		Val	Ala	Sor	Val		Pro	Ara	lve	Pro		Ala	Val
Leu	Mia	435	Leu	141	MIG	361	440	1) 1	110	m g	LyJ	445	0111	MIG	, (, 1
Glu	Arg		Val	Leu	Pro	He		Trn	His	Phe	Leu		Thr	Ala	Thr
GIU	450	3 8 3 43		2,0 U	. 10	455	1500		11,10	1 110	460			11,10	
Arø		Glv	Ala	Leu	Pro		Pro	Ser	Gly	Asn		Arg	Glv	Val	Val
465					470					475		0	•		480

Cys Arg Leu Ser Arg Ser Leu Gln Glu His Met Gly Ser Arg Leu Leu 490 Asp Phe Ala Ala Ser Gln Pro Lys His Val Leu Lys Thr Leu Gln Glu 500 505 Leu Leu Asp Ser Glu Ser Leu Gly Gly Ser Arg Lys Ala Thr Asp Arg 520 525 Gly Val Ala Pro Asp Ser Lys Thr Thr Gly Ser Ser Tyr Pro Phe Gln 535 540 Leu Asp 545 <210> 3051 <211> 569 <212> PRT <213> Homo sapiens <400> 3051 Met Ser Gln Val Ile Ala Ser Gly Ala Asp Leu Ile Ala Gln Thr Leu 1 5 10 15 Lys Asn Gln Gly Val Gln Val Ile Phe Gly Ile Val Gly Ile Pro Val 25 Val Glu Val Ala Glu Ala Cys Val Ala Ala Gly Ile Arg Phe Ile Gly 40 45 Phe Arg Asn Glu Gln Ser Ala Ala Tyr Ala Ala Ser Ile Tyr Gly Tyr 55 Leu Ser Gly Arg Pro Gly Val Cys Leu Ser Val Gly Gly Pro Gly Val 75 · 70 Val His Ala Leu Ala Gly Leu Leu Asn Ser Lys 11e Asn Cys Trp Pro 85 90 95 Leu Ile Leu Leu Ser Gly Ser Cys Glu Thr Asp Gln Thr Asp Met Gly 105 Ala Phe Gln Glu Leu Asp Gln Val Glu Ala Ala Arg Gln Tyr Cys Lys 115 120 125

Tyr Ser Ala Arg Pro Ala Ser Leu Glu Gln Leu Pro Phe Val 11e Glu

140

135

Lys	Ala	Phe	Arg	Thr	Ala	Leu	Tyr	Gly	Arg	Pro	Gly	Ala	Ala	Tyr	Val
145					150					155					160
Asp	Leu	Pro	Ala	Asp	Tyr	He	Gln	Tyr	Pro	Ile	Thr	Asn	Lys	Lys	Val
				165					170					175	
Phe	Asp	Ala	Val	Gln	Val	Ala	Arg	Val	Pro	Asn	Ala	Pro	Lys	Ser	Met
			180					185					190		
Ala	Asp	Gln	Thr	Asn	Val	His	Gln	Ala	Val	Ala	Leu	Leu	Lys	His	Ala
		195					200					205			
Lys	Ser	Pro	Leu	He	Val	Ile	Gly	Lys	Gly	Ala	Ala	Tyr	Ala	Arg	Ala
	210					215					220				
Glu	Asn	Glu	He	Arg	Ala	Leu	Val	Glu	Lys	Thr	Gln	Ala	Pro	Phe	Leu
225					230					235					240
Pro	Thr	Pro	Met	Gly	Lys	Gly	Val	He	Ser	Asp	Ser	His	Pro	Leu	Cys
				245					250					255	
Val	Ser	Ala	Ala	Arg	Ser	Lys	Ala	Leu	Lys	Asp	Ala	Asp	Val	Val	Leu
			260					265					270		
Leu	Ile	Gly	Ala	Arg	Leu	Asn	Trp	Ile	Leu	His	Tyr	Gly	His	Ser	Pro
		275					280					285			
Arg	Trp	Ser	Asn	Lys	Val	Arg	Phe	Ile	Gln	lle	Asp	lle	Ala	Pro	Glu
	290					295					300				
Glu	Leu	Gly	Asn	Asn	Arg	Gln	Asp	Thr	Leu	Pro	Leu	Leu	Gly	Asp	Ile
305					310					315					320
Gln	Leu	Val	Val	Ser	Gln	lle	Thr	Gln	Ala	Leu	Thr	Gly	Lys	Leu	Ser
				325					330					335	
Asn	He	Asn	Pro	Asp	Tyr	Val	Ser	Gly	Leu	Val	Asn	Lys	Val	Lys	Gln
			340					345					350		
Asn	Val	Glu	Lys	Thr	Lys	Thr	Ala	Gly	Ser	Lys	Gly	Ser	Asp	Ser	Ala
		355					360					365			
lle	Leu	Asn	Tyr	Ser	Thr	Ala	Phe	Thr	Val	He	Lys	Ser	Leu	Leu	Pro
	370					375					380				
Glu	Asn	Asp	He	Val	Tyr	Val	Ser	Glu	Gly	Ala	Asn	Thr	Met	Asp	He
385					390					395					400
Gly	Arg	Ser	Tyr	Phe	Asp	Val	His	Glu	Pro	Arg	His	Arg	Leu	Asp	Ala
				405					410					415	
Gly	Thr	Gly	Ala	Thr	Met	Gly	Val	Gly	Met	Gly	Tyr	Ala	lle	Gly	Ala
			420					425					430		

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Gln Ser Tyr Tyr Gly Asp Ala Lys Arg Val Val Ser Ile Val Gly Asp
                            440
Ser Ala Phe Gly Phe Ser Ala Met Glu Leu Glu Thr Ala Ile Arg Ser
                        455
                                            460
Arg Leu Pro Leu Leu Ile Ile Val Ile Asn Asn Asn Gly Ile Tyr His
                                        475
                    470
                                                             480
Gly Leu Glu Asp Glu Glu Tyr His Ala Ala Leu Lys Asp Gly Thr Leu
                                    490
                485
Pro Thr Thr Ser Leu Ser Val Glu Thr Arg Tyr Asp Leu Ile Ser Glu
            500
                                505
                                                    510
Ala Cys Gly Gly Lys Gly Trp Phe Val Lys Asn Arg Val Glu Leu Ala
                            520
                                                525
Lys Ala Val Lys Glu Ala Leu Ala Ala Lys Asp Gln Thr Cys Val Val
    530
                        535
Asn Val Met Ile Ala Pro Gly Gly Arg Thr Lys Leu Asp Phe Gly Trp
                    550
                                        555
                                                             560
Met Gln Lys Thr Gln Lys Ala Arg Leu
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<210> 3052

<211> 307

<212> PRT

<213> Homo sapiens

<400> 3052

Met Pro Lys Val Tyr Ser Arg Lys Asp Pro Leu Leu Phe Cys Arg Arg

1 5 10 15

Phe Val Gly Gly 11e Leu 11e Ala Arg Lys I1e Phe Trp Pro Leu Glu 20 25 30

Asn Val Leu Leu Lys Ser Gly Met Leu Ala Glu Lys Val Met Lys Lys
35 40 45

Glu Asn His 11e Leu Ser Val Asp Asp Leu Glu Gln Ala Leu Glu Leu 50 55 60

Thr Asp Lys Asp Asp 11e Lys Asp Glu Gln Ser Met Leu Lys Gly 11e
65 70 75 80

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Ile Arg Phe Gly Asp Glu Thr Ala Lys Glu Val Met Thr Ser Arg Gln
                                     90
Asn lle Val Asp Leu Asp lle His Ser Thr Tyr Pro Glu Val Leu Lys
                                105
            100
                                                     110
Cys lle Ala Glu Asn Asn Tyr Ser Arg lle Pro Val Tyr Gln Asp Asn
                            120
                                                 125
Thr Asp Asn Ile Arg Gly Ile Leu Tyr Ile Lys Asp Leu Leu Pro His
    130
                        135
                                            140
Leu Glu Lys Pro Val Ser Phe Arg Trp Gln Ser Leu Ile Arg Pro Pro
145
                    150
                                         155
                                                             160
Tyr Phe Val Pro Glu Thr Lys Lys Ile Asp Asp Leu Leu Arg Glu Phe
                                    170
Gln Glu Asn Lys Val His Ile Ala Ile Val Val Asp Glu Phe Gly Gly
            180
                                185
                                                     190
Thr Ser Gly 11e Val Thr Leu Glu Asp IIe Leu Glu Glu IIe Val Gly
                            200
                                                 205
Glu lle Asn Asp Glu Tyr Asp Glü Glu Glu Lys Phe Tyr Ser Lys Leu
    210
                        215
                                             220
Asn Tyr Asn Thr Phe Ile Phe Glu Gly Lys Thr Leu Leu Thr Asp Phe
225
                    230
                                         235
                                                             240
Cys Lys lle Leu Asn Val Asp Asp Glu Glu Phe Glu Glu Val Glu Gly
                245
                                    250
Asp Ala Asp Thr Leu Ala Gly Leu Leu Leu Glu Ile Lys Gly Asp Phe
            260
                                265
                                                     270
Pro Ser Ile His Glu Lys Ile Glu Tyr Lys Asn Tyr Ser Phe Glu Val
                            280
                                                 285
Leu Gly Val Glu Glu Arg Arg lle Ser Arg lle Lys Val Val His
    290
                        295
                                             300
Pro Gly Lys
305
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<210> 3053

<211> 422

<212> PRT

<213> Homo sapiens

<400> 3053															
Met	Ala	Ser	Lys	Phe	Thr	Asp	Gly	Asp	Leu	Asn	Asn	Asp	Gly	Pro	His
1				5					10					15	
Asp	Glu	Gly	Leu	Arg	Ser	Ser	Gln	Gln	Asn	Pro	Lys	Val	Gln	Lys	Tyr
			20					25					30		
He	Ser	Phe	Ser	Leu	Pro	Leu	Ser	Glu	Ala	Thr	Ala	His	lle	Tyr	Pro
		35					40					45			
Gly	Asp	Ser	Ala	Val	Ala	Asn	Lys	Gln	Pro	Ser	Pro	Gln	Leu	Ser	Ser
	50					55					60				
Glu	Asp	Ser	Asp	Ser	Asp	Tyr	Glu	Leu	Cys	Pro	Glu	lle	Thr	Leu	Thr
65					70					75					80
Tyr	Thr	Glu	Glu	Phe	Ser	Asp	Asp	Asp	Leu	Glu	Tyr	Leu	Glu	Cys	Ser
				85					90					95	
Asp	Val	Met	Thr	Asp	Tyr	Ser	Asn	Ala	Val	Trp	Gln	Arg	Asn	Leu	Leu
			100					105					110		
Gly	Thr	Glu	His	Val	Phe	Leu	Leu	Glu	Ser	Asp	Asp	Glu	Glu	Met	Glu
		115					120					125			
Phe	Gly	Glu	His	Cys	Leu	Gly	Gly	Cys	Glu	His	Phe	Leu	Ser	Gly	Met
	130					135					140				
Gly	Cys	Gly	Ser	Arg	Val	Ser	G1 y	Asp	Ala	Gly	Pro	Met	Val	Ala	Thr
145					150					155					160
Ala	Gly	Phe	Cys	Gly	His	His	Ser	Gln	Pro	Gln	Glu	Val	Gly	Val	Arg
				165					170					175	
Ser	Ser	Arg	Val	Ser	Lys	His	Gly	Pro	Ser	Ser	Pro	Gln	Thr	Gly	Met
			180					185					190		
Thr	Leu		Leu	Gly	Pro	His		Asp	G1 y	Thr	Ser		Val	Thr	Glu
		195					200					205			
Gln		Arg	Tyr	Lys	Leu		Thr	Ala	Pro	Glu		Ala	Glu	Asn	Asp
	210					215					220				
	Pro	Gly	He	Gln		Glu	Thr	Arg	Asp		His	Gln	Ala	Arg	
225			_		230					235		_			240
Glu	Phe	Ala	Ser		Asn	Leu	Leu	Asn		Asp	Glu	Ser	Val	Arg	Glu
m:				245		· ,	<i>a</i> :	0.3	250	63	ā.		6.7	255	
Thr	Glu	Met		Leu	Leu	Ser	Gly		Ser	Glu	Asn	Ser		Met	Ser
			260					265					270		

Gln Cys Trp Glu Thr Ala Ala Asp Lys Arg Val Gly Gly Lys Asp Leu Trp Ser Lys Arg Gly Ser Arg Lys Ser Ala Arg Val Arg Gln Pro Gly Met Lys Gly Asn Pro Lys Lys Pro Asn Ala Asn Leu Arg Glu Ser Thr Thr Glu Gly Thr Leu His Leu Cys Ser Ala Lys Glu Ser Ala Glu Pro Pro Leu Thr Gln Ser Asp Lys Arg Glu Thr Ser His Thr Thr Ala Ala Ala Thr Gly Arg Ser Ser His Ala Asp Ala Arg Glu Cys Ala Ile Ser Thr Gln Ala Glu Gln Glu Ala Lys Thr Leu Gln Thr Ser Thr Asp Ser Val Ser Lys Glu Gly Asn Thr Asn Cys Lys Gly Glu Gly Met Gln Val Asn Thr Leu Phe Glu Thr Ser Gln Val Pro Asp Trp Ser Asp Pro Pro Gln Val Arg Leu Phe Phe <210> 3054 <211> 184 <212> PRT <213> Homo sapiens <400> 3054 Met Ala Ala Phe Tyr Leu Val Ala Arg Glu Glu Ile Ala Leu Leu Leu

Gly Ser Pro Leu Ser Arg Pro Ala Val Ser Thr Phe Cys Phe Leu Phe
20 25 30

Phe Leu Glu Thr Gln Phe Arg Ser Cys Cys Pro Asp Trp Ser Ala Met
35 40 45

Ser Arg Tyr Gln Leu Thr Ser Thr Ser Ala Ser Trp Val Gln Ala 11e
50 55 60

Leu Leu Pro Arg Pro Pro Leu Val Ala Gly Ile Ala Ala His His Gln Ala Arg Leu Ile Phe Val Phe Leu Val Gln Thr Gly Phe Cys Arg Val Asp Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Ala Gly Val Ser His Cys Ala Gln Pro His Phe Ser Leu Ser Ser Gln Ser Leu Gly His Lys Ile Pro His His Ser Pro Ala Lys Lys Met Pro Thr Phe Leu Asp Leu Ile Val Ser Leu Lys Gln Asn Lys Thr Lys Phe Asn lle Tyr Thr Pro Arg Thr Leu Val Ser Glu Ile Leu Gly Leu Ile

<210> 3055

<211> 508

<212> PRT

<213> Homo sapiens

<400> 3055

Met Leu Leu Ser Gln Gly Leu Gly Val Leu Arg Val Ala Trp Asp Ser Arg Ala Cys Ser Pro Ala Leu Arg Ala Leu Leu Arg Lys Leu Gly Gly Leu Phe Leu Pro Pro Glu Ala Ser Leu Ser Leu Asp Ser Ser Glu Gly Leu Leu Ala Arg Ala Val Val Gln Ala Ala Ser Ala Pro Leu Gly Leu Trp Thr Gly Ala Leu Ala Val Leu Arg Ser Leu Trp Ser Arg Trp Gly

Cys Ser His Arg lle Cys Ser Arg Val His Leu Ala Gln Pro Phe Ser

Leu	Gln	Glu	Tyr	Ile	Val	Ser	Ala	Arg	Ser	Cys	Trp	Gly	Gly	Arg	Gln
			100					105					110		
Thr	Leu	Glu	Gln	Leu	Leu	Gln	Pro	He	Val	Leu	Gly	Gln	Cys	Thr	Ala
		115					120					125			
Val	Pro	Asp	Thr	Glu	Lys	Glu	Gln	Glu	Trp	Thr	Pro	lle	Thr	G1 y	Pro
	130					135					140				
Leu	Leu	Ala	Leu	Lys	Glu	Glu	Asp	Gln	Leu	Leu	Val	Arg	Arg	Leu	Ser
145					150					155					160
Cys	His	Val	Leu	Ser	Ala	Ser	Val	Gly	Ser	Ser	Ala	Val	Met	Ser	Thr
				165					170					175	
Ala	He	Met	Ala	Thr	Leu	Leu	Leu	Phe	Lys	His	Gln	Lys	Leu	Leu	Gly
			180					185					190		
Glu	Phe	Ser	Trp	Leu	Thr	Glu	Glu	He	Leu	Leu	Arg	Gly	Phe	Asp	Val
		195					200					205			
Gly	Phe	Ser	Gly	Gln	Leu	Arg	Ser	Leu	Leu	Gln	His	Ser	Leu	Ser	Leu
	210					215					220				
Leu	Arg	Ala	His	Val	Ala	Leu	Leu	Arg	lle	Arg	Gln	Gly	Asp	Leu	Leu
225					230					235					240
Va]	Val	Pro	Gln		Gly	Pro	Gly	Leu		His	Leu	Ala	Gln		Ser
				245					250					255	
Ala	Glu	Leu		Pro	Val	Phe	Leu		Glu	Ala	Val	Gly		Cys	Ala
			260					265					270		
Val	Arg		Leu	Leu	Ala	Gly		Val	Pro	Pro	GIn		Pro	Trp	Glu
	0.1	275			•		280	0.1		0.1		285		0.1	
Leu		Gly	He	Leu	Leu	Leu	Ser	GIn	Asn	Glu		lyr	Arg	GIn	He
	290			11.		295	n	C1	Δ	Ι	300	1	1	1	D
	Leu	Leu	Met	HIS		Leu	Pro	GIn	Asp		Leu	Leu	Leu	Lys	
305	Cl.	Can	Can	Т	310	Т	Cua	Cln	C1	315	Lou	Aan	Ama	Lou	320
Cys	GIN	261.	Ser	325	Cys	Tyr	Cys	GIII	330	val	Leu	ASP	MI 8		1.16
Cla	Cva	C1 _v	Lau		Vol	Alo	Clu	Clu		Dro	C1v	Sor	Ara	335 Pro	A10
GIII	Cys	СТУ	340	Leu	vai	Ala	Olu	345	1111	110	Gly	361	350	110	ма
Cva	Acn	The		Ana	Cln	Ara	Lou		Λιτα	Lve	Lou	Lou		lve	Dro
Cys	nsp	355	Oly	vi g	OIII	Arg	360	261	vi g	LVS	Leu	365	шр	LyS	110
Sor	Glv		Pho	The	Acn	Ser		Ser	Acn	Acn	Pho		Glu	Ala	Acn
261	370	лър	i ne	1 111	иsh	375	лэр	⊃e1	nsb	ush	380	оту	oru	ma	nsp
	210					010					JUU				

Gly Arg Tyr Phe Arg Leu Ser Gln Gln Ser His Cys Pro Asp Phe Phe Leu Leu Cys Arg Leu Leu Ser Pro Leu Leu Lys Ala Phe Ala Gln Ala Ala Ala Phe Leu Arg Gln Gly Gln Leu Pro Asp Thr Glu Leu Gly Tyr Thr Glu Gln Leu Phe Gln Phe Leu Gln Ala Thr Ala Gln Glu Glu Gly lle Phe Glu Cys Ala Asp Pro Lys Leu Ala Ile Ser Ala Val Trp Thr Phe Arg Asp Leu Glv Val Leu Gln Gln Thr Pro Ser Pro Ala Gly Pro Arg Leu His Leu Ser Pro Thr Phe Ala Ser Leu Asp Asn Gln Glu Lys Leu Glu Gln Phe Ile Arg Gln Phe Ile Cys Ser

<210> 3056

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<212> PRT

<213> Homo sapiens

<400> 3056

Met Glu Thr Thr Gly Asp Gln Gly Ile Glu Gly Met Ala Tyr Met Asp Glu Asn Arg Asn lle Thr Phe Thr Cys Pro Arg Thr Pro Ser Glu Leu lle Asn Lys Ser Ser Pro Leu Glu Val Leu Gly Ser Ala Ala Cys Glu Lys Leu Pro Thr Pro Thr Pro Gln Val Val Lys Glu Gly Asp Ser Phe Pro Asp Thr Leu Ala Lys Asn Gly Gln Glu lle Ala Pro Ala Gln lle Ser Lys Ser Leu Met Val Asp Asn Tyr Thr Lys Asp Gly Val Pro Gly

85 90 95

Gln	Glu	Arg	Pro	Lys	Gly	Pro	Ser	Ala	Val	Val	Pro	Ser	Thr	Ser	Thr
			100					105					110		
Gly	Gly	Val	Ala	Leu	Pro	He	Thr	Thr	Ala	lle	Glu	Thr	Val	Asn	He
		115					120					125			
His	Gly	Asp	His	Ser	Leu	Lys	Asn	Lys	Ala	Glu	Leu	Ala	Asp	Ser	Met
	130					135					140				
Lys	Asn	Glu	Ala	Gly	He	Asp	Glu	Gly	His	Va]	He	G1 y	Glu	Ser	Glu
145					150					155					160
Ser	Val	His	Ser	Gly	Ala	Ser	Lys	His	Ser	Val	Glu	Lys	Val	Thr	Glu
				165					170					175	
Leu	Ala	Lys		His	Leu	Leu	Pro		.Val	Pro	Val	Glu		Gln	Ser
			180					185					190		
Leu	Pro		Glu	Ala	Arg	Ala		Glu	Gly	Tyr	Ala		Arg	Gly	Asn
D		195		Б			200	0.1		61	m.	205	0.1	0.7	
Phe		Ala	His	Pro	Val	Asn	Glu	Glu	Lys	Glu		Lys	Glu	Gly	Ser
V - 1	210	V = 1	C1	11.	D	215	1	h	C1	Δ	220	41.	C1	1	1
	Ala	vai	Gin	116		Asp	Leu	Leu	Glu		Lys	Ala	GIN	Lys	
225 Sor	Dho	Cvc	Clu	Acn	230 61n	Asn	Ala	Cln	Acn	235	Acn	Sor	Lvc	C1v	240 Sar
261	rne	Cys	Giu	245	GIII	ASII	міа	GIII	250	MI g	ASII	Sei	Lys	255	261
Asn	Ser	Leu	Asn		lve	Val	Asn	Len		Len	Leu	Ser	Pro		Ser
пор	501	neu	260	LJO	L,U	, (1)	пор	265	1112	Bed	1500	001	270	2,5	001
Glu	Asn	Asp		Leu	Lvs	Glu	11e		Leu	Ala	Cvs	Lvs		Thr	Glu
		275	2				280				- 2	285			
Leu	Glu	Ser	Val	Ser	Leu	Pro		Pro	Glu	He	Gln		Asp	Phe	Leu
	290					295					300				
His	Ser	Lys	Val	Glu	Ala	Pro	Pro	Ser	Glu	Val	Ala	Asp	Thr	Leu	Val
305					310					315					320
11e	Met	Thr	Ala	Ser	Lys	Gly	Va]	Arg	Leu	Pro	Glu	Pro	Lys	Asp	Lys
				325					330					335	
He	Leu	Glu	Thr	Pro	Gln	Lys	Met	Thr	Glu	Lys	Ser	Glu	Ser	Lys	Thr
			340					345					350		
Pro	Gly	Glu	Gly	Lys	Lys	Glu	Asp	Lys	Ser	Arg	Met	Ala	G1u	Pro	Met
		355					360					365			
Lys	Gly	Tyr	Met	Arg	Pro	Thr	Lys	Ser	Arg	Gly	Leu	Thr	Pro	Leu	Leu
	370					375					380				

Pro	Lys	Ser	Thr	He	Gln	Glu	Gln	Glu	Arg	His	Lys	Gln	Leu	Lys	Ser
385					390					395					400
Ala	Gly	11e	Ala	Arg	Pro	Glu	Glu	Gly	Arg	Pro	Val	Val	Ser	Gly	Thr
				405					410					415	
Gly	Asn	Asp	He	Thr	Thr	Pro	Pro	Λsn	Lys	Glu	Leu	Pro	Pro	Ser	Pro
			420					425					430		
Glu	Lys	Lys	Thr	Lys	Pro	Leu	Ala	Thr	Thr	Gln	Pro	Ala	Lys	Thr	Ser
		435					440					445			
Thr	Ser	Lys	Ala	Lys	Thr	Gln	Pro	Thr	Ser	Leu	Pro	Lys	Gln	Pro	Ala
	450					455					460				
Pro	Thr	Thr	Ile	Gly	Gly	Leu	Asn	Lys	Lys	Pro	Met	Ser	Leu	Ala	Ser
465					470					475					480
Gly	Leu	Val	Pro	Ala	Ala	Pro	Pro	Lys	Arg	Pro	Ala	Val	Ala	Ser	Ala
				485					490					495	
Arg	Pro	Ser	He	Leu	Pro	Ser	Lys	Asp	Val	Lys	Pro	Lys	Pro	He	Ala
			500					505					510		
Asp	Ala	Lys	Ala	Pro	Glu	Lys	Arg	Ala	Ser	Pro	Ser	Lys	Pro	Ala	Ser
		515					520					525			
Ala	Pro	Ala	Ser	Arg	Ser	Gly	Ser	Lys	Ser	Thr	Gln	Thr	Val	Ala	Lys
	530					535					540				
Thr	Thr	Thr	Ala	Ala	Ala	Val	Ala	Ser	Thr	Gly	Pro	Ser	Ser	Arg	Ser
545					550					555					560
Pro	Ser	Thr	Leu	Leu	Pro	Lys	Lys	Pro	Thr	Ala	11e	Lys	Thr	Glu	G1 y
				565					570					575	
Lys	Pro	Ala	Glu	Val	Lys	Lys	Met	Thr	Ala	Lys	Ser	Va]	Pro	Ala	Asp
			580					585					590		
Leu	Ser	Arg	Pro	Lys	Ser	Thr	Ser	Thr	Ser	Ser	Met	Lys	Lys	Thr	Thr
		595					600					605			
Thr	Leu	Ser	Gly	Thr	Ala	Pro	Ala	Ala	Gly	Val	Val	Pro	Ser	Arg	Val
	610					615					620				
Lys	Ala	Thr	Pro	Met	Pro	Ser	Arg	Pro	Ser	Thr	Thr	Pro	Phe	He	Asp
625					630					635					640
Lys	Lys	Pro	Thr	Ser	Ala	Lys	Pro	Ser	Ser	Thr	Thr	Pro	Arg	Leu	Ser
				645					650					655	
Arg	Leu	Ala	Thr	Asn	Thr	Ser	Ala	Pro	Asp	Leu	Lys	Asn	Val	Arg	Ser
			660					665					670		

 Lys
 Ala
 Lys
 Val
 Glu
 Lys
 Lys
 Thr
 Glu
 Ala
 Ala
 Ala
 Thr
 Arg
 Lys

 Pro
 Glu
 Ser
 Asn
 Ala
 Val
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<210> 3057

<211> 743

<212> PRT

<213> Homo sapiens

<400> 3057

Met Leu His Phe Asn Arg Cys His His Leu Lys Lys 11e Thr Gln Lys

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Cys Phe Ser Ser Ile His Val Lys Thr Asp Lys His Ala Gln Arg Phe 20 25 30

Leu Ser Arg Thr Phe Ala Leu Ala Glu Leu Arg Lys Ser Trp Tyr Ser 35 40 45

Thr His Ser Leu Val Gly Asp Lys Asn Ile lle Leu Met Gly Pro Pro 50 55 60

Gly Ala Gly Lys Thr Thr Val Gly Arg He He Gly Gln Lys Leu Gly
65 70 75 80

Cys Cys Val 11e Asp Val Asp Asp Asp 11e Leu Glu Lys Thr Trp Asn 85 90 95

Met Ser Val Ser Glu Lys Leu Gln Asp Val Gly Asn Glu Gln Phe Leu 100 105 110

Glu Glu Glu Gly Lys Ala Val Leu Asn Phe Ser Ala Ser Gly Ser Val 115 120 125

Ile Ser Leu Thr Gly Ser Asn Pro Met His Asp Ala Ser Met Trp His 130 135 140

Leu Lys Lys Asn Gly Ile Ile Val Tyr Leu Asp Val Pro Leu Leu Asp 145 150 155 160

Leu Ile Cys Arg Leu Lys Leu Met Lys Thr Asp Arg Ile Val Gly Gln 165 170 175

Asn	Ser	Gly	Thr	Ser	Met	Lys	Asp	Leu	Leu	Lys	Phe	Arg	Arg	Gln	Tyr
			180					185					190		
Tyr	Lys	Lys	Trp	Tyr	Asp	Ala	Arg	Val	Phe	Cys	Glu	Ser	Gly	Ala	Ser
		195					200					205			
Pro	Glu	Glu	Val	Ala	Asp	Lys	Val	Leu	Asn	Ala	He	Lys	Arg	Tyr	Gln
	210					215					220				
Asp	Val	Asp	Ser	Glu	Thr	Phe	He	Ser	Thr	Arg	His	Val	Trp	Pro	Glu
225					230					235					240
Asp	Cys	Glu	Gln	Lys	Val	Ser	Ala	Lys	Phe	Phe	Ser	Glu	Ala	Val	He
				245					250					255	
Glu	Gly	Leu		Ser	Asp	Gly	G1 y		Phe	Val	Pro	Ala	Lys	Glu	Phe
			260					265					270		
Pro	Lys		Ser	Cys	Gly	Glu		Lys	Ser	Leu	Val		Ala	Thr	Tyr
	0.1	275		0.3	* *		280	0.3			7.3	285	Б		
Val		Arg	Ala	GIn	He		Leu	Glu	Arg	Cys		His	Pro	Ala	Asp
т1.	290 D	A 1 -	A 1 -	Λ	1	295	C1	14 - 4	11.	C1	300	41.	т	C1	C1
	Pro	Ата	Ala	Arg		ыу	GIU	мет	11e		ınr	Ala	Tyr	Gly	
305	Dho	Λlα	Cvc	Sor	310	110	Ala	Dro	Vo.1	315	Цic	Lou	Ser	Cly	320
ASII	rne	на	. Cys	325	Lys	116	на	L10	330	ΑΙ g	птѕ	Leu	Sel	335	ASII
Gln	Phe	He	Leu		Leu	Phe	Hic	Glv		Thr	Glv	Ser	Phe		Asn
0111	1110	110	340	oru	Lou	1110	1113	345	110		013	001	350	Lyo	тор
Leu	Ser	Leu		Leu	Met	Pro	His		Phe	Ala	His	Cvs	lle	Pro	Pro
		355					360					365			
Ser	Cys		Tyr	Met	He	Leu		Ala	Thr	Ser	Gly		Thr	Gly	Ser
	370					375					380				
Ala	Val	Leu	Asn	Gly	Phe	Ser	Arg	Leu	Asn	Lys	Asn	Asp	Lys	Gln	Arg
385					390					395					400
lle	Ala	Va]	Val	Ala	Phe	Phe	Pro	Glu	Asn	Gly	Va]	Ser	Asp	Phe	Gln
				405					410					415	
Lys	Ala	Gln	11e	11e	Gly	Ser	Gln	Arg	G]u	Asn	Gly	Trp	Ala	Va]	G1 y
			420					425					430		
Val	Glu	Ser	Asp	Phe	Asp	Phe	Cys	Gln	Thr	Ala	He	Lys	Arg	He	Phe
		435					440					445			
Asn	Asp	Ser	Asp	Phe	Thr	Gly	Phe	Leu	Thr	Val	Glu	Tyr	Gly	Thr	He
	450					455					460				

Leu	Ser	Ser	Ala	Asn	Ser	He	Asn	Trp	Gly	Arg	Leu	Leu	Pro	Gln	Val
465					470					475					480
Val	Tyr	His	Ala	Ser	Ala	Tyr	Leu	Asp	Leu	Val	Ser	Gln	Gly	Phe	He
				485					490					495	
Ser	Phe	Gly	Ser	Pro	Val	Лsр	Val	Cys	Пе	Pro	Thr	Gly	Asn	Phe	Gly
			500					505					510		
Asn	lle	Leu	Ala	Ala	Val	Tyr	Ala	Lys	Met	Met	Gly	lle	Pro	lle	Arg
		515					520					525			
Lys	Phe	Ile	Cys	Ala	Ser	Asn	Gln	Asn	His	Va]	Leu	Thr	Asp	Phe	lle
	530					535					540				
Lys	Thr	Gly	His	Tyr	Asp	Leu	Arg	Glu	Arg	Lys	Leu	Ala	Gln	Thr	Phe
545					550					555					560
Ser	Pro	Ser	lle	Asp	He	Leu	Lys	Ser	Ser	Asn	Leu	Glu	Arg	His	Leu
				565					570					575	
His	Leu	Met	Ala	Asn	Lys	Asp	Gly	Gln	Leu	Met	Thr	Glu	Leu	Phe	Asn
			580					585					590		
Arg	Leu	Glu	Ser	Gln	His	His	Phe	Gln	Ile	Glu	Lys	Ala	Leu	Val	Glu
		595					600					605			
Lys	Leu	Gln	Gln	Asp	Phe	Val	Ala	Asp	Trp	Cys	Ser	Glu	Gly	Glu	Cys
	610					615					620				
Leu	Ala	Ala	He	Asn	Ser	Thr	Tyr	Asn	Thr	Ser	Gly	Tyr	lle	Leu	Asp
625					630					635					640
Pro	His	Thr	Ala	Val	Ala	Lys	Val	Val	Ala	Asp	Arg	Va]	Gln	Asp	Lys
				645					650					655	
Thr	Cys	Pro	Val	lle	He	Ser	Ser	Thr	Ala	His	Tyr	Ser	Lys	Phe	Ala
			660					665					670		
Pro	Ala	He	Met	Gln	Ala	Leu	Lys	He	Lys	Glu	He	Asn	Glu	Thr	Ser
		675					680					685			
Ser	Ser	Gln	Leu	Tyr	Leu	Leu	Gly	Ser	Tyr	Asn	Ala	Leu	Pro	Pro	Leu
	690					695					700				
His	Glu	Ala	Leu	Leu	Glu	Arg	Thr	Lys	Gln	Gln	Glu	Lys	Met	Glu	Tyr
705					710					715					720
Gln	Val	Cys	Ala	Ala	Asp	Met	Asn	Val	Leu	Lys	Ser	His	Va]	Glu	Gln
				725					730					735	
Leu	Val	Gln	Asn	${\sf Gln}$	Phe	He									

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Gln	Leu	Glu	Ala	Trp	Asp	Leu	Asp	Asp	lle	Leu	Gln	Ser	Leu	Ala	Gly
			20					25					30		
Gln	Glu	Asp	Asn	Gln	Gly	Asn	Arg	Ala	Pro	Gly	Thr	Val	Trp	Trp	Ala
		35					40					45			
Ala	Asp	His	Arg	Gln	Val	Gln	Asp	Cys	Met	Val	Pro	Ser	Ala	His	Asn
	50					55					60				
Arg	Leu	Met	Glu	Gln	Leu	Ala	Leu	Leu	Cys	Thr	Thr	Gln	Ser	Lys	Ala
65					70					75					80
Ser	Ala	Cys	Ala	Arg	Lys	Val	Pro	Ala	Asp	Thr	Pro	Gln	Asp	Thr	Lys
				85					90					95	
Glu	Ala	Asp	Ser	Gly	Ser	Arg	Cys	Ala	Ser	Arg	Lys	Arg	Gly	Ser	Gln
			100					105					110		
Ala	Gly	Pro	Gly	Pro	Gln	Leu	Ala	Gln	Gly	Met	Arg	Leu	Asn	Ala	Glu
		115					120					125			
Ser	Pro	Thr	He	Phe	lle	Asp	Leu	Arg	Gln	Met	Glu	Leu	Pro	Asp	His
	130					135					140				
Leu	Ser	Pro	Glu	Ser	Ser	Ser	His	Ser	Ser	Ser	Asp	Ser	Glu	Glu	Glu
145					150					155					160
Glu	Glu	Glu	Glu	Met	Ala	Ala	Leu	Gly	Asp	Ala	Glu	Gly	Ala	Ser	Pro
				165					170					175	
Ser	Ser	Leu	Gly	Leu	Arg	Thr	Cys	Thr	Gly	Lys	Ser	Gln	Leu	Leu	Gln
			180					185					190		
Gln	Leu	Arg	Ala	Phe	Gln	Lys	Gly	Thr	Ala	Gln	Pro	Glu	Leu	Pro	Ala
		195					200					205			
Ser	Lys	Gly	Pro	Ala	Gly	Gly	Arg	Ala	Gln	Ala	Leu	Glu	Asp	Thr	Ala
	210					215					220				
Gly	Ser	Arg	Thr	Gly	Arg	Lys	Gln	His	Met	Lys	Leu	Cys	Ala	Lys	G1 y
225					230					235					240
G1n	Ser	Ala	Gln	Ala	Arg	Leu	Pro	Arg	Gly	Arg	Pro	Arg	Ala	Leu	G1 y
				245					250					255	
Asp	Val	Pro	Glu	Pro	Gly	Ala	Ala	Arg	Glu	Ala	Leu	Met	Pro	Pro	Leu
			260					265					270		
Glu	Gln	Leu													
		275													

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Met Val Pro Glu Glu Glu Pro Gln Asp Arg Glu Lys Gly Leu Trp Trp
Phe Gln Leu Lys Val Trp Ser Met Ala Val Val Ser Ile Leu Leu Leu
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                                                      30
Ser Val Cys Phe Thr Val Ser Ser Val Val Pro His Asn Phe Met Tyr
                             40
Gly Lys Thr Val Lys Arg Leu Ser Lys Leu Arg Glu Tyr Gln Gln Tyr
     50
                         55
His Pro Ser Leu Thr Cys Val Met Glu Gly Lys Asp lle Glu Asp Trp
                     70
                                          75
 65
Ser Cys Cys Pro Thr Pro Trp Thr Ser Phe Gln Ser Ser Cys Tyr Phe
                                     90
Ile Ser Thr Gly Met Gln Ser Trp Thr Lys Ser Gln Lys Asn Cys Ser
            100
                                105
Val Met Gly Ala Asp Leu Val Val Ile Asn Thr Arg Glu Glu Gln Asp
                            120
Phe Ile Ile Gln Asn Leu Lys Arg Asn Ser Ser Tyr Phe Leu Gly Leu
    130
                        135
                                             140
Ser Asp Pro Gly Gly Arg Arg His Trp Gln Trp Val Asp Gln Thr Pro
145
                    150
                                        155
Tyr Asn Glu Asn Val Thr Phe Trp His Ser Gly Glu Pro Asn Asn Leu
                                    170
Asp Glu Arg Cys Ala Ile Thr Asn Phe Arg Ser Ser Glu Glu Trp Gly
            180
                                 185
                                                     190
Trp Asn Asp lle His Cys His Val Pro Gln Lys Ser lle Cys Lys Met
        195
                            200
                                                 205
Lys Lys Ile Tyr Ile
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<210> 3062

<211> 574

<212> PRT

<213> Homo sapiens

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His	Leu	Val	Ser	Ser	Asp	Gly	Gly	Thr	Glu	Pro	Ser	Ala	Leu	Val	Asp
			20					25					30		
Asp	Asn	Gly	Ser	Glu	Glu	Asp	Phe	Ser	Tyr	Glu	Asp	Leu	Cys	Gln	Ala
		35					40					45			
Ser	Pro	Arg	Tyr	Leu	Gln	Pro	Gly	Gly	Glu	Gln	Leu	Ala	Ile	Asn	Glu
	50					55					60				
Leu	Ile	Ser	Asp	Gly	Asn	Val	Val	Cys	Ala	Glu	Ala	Leu	Trp	Asp	His
65					70					75					80
Val	Thr	Met	Asp	Asp	Gln	Glu	Leu	Gly	Phe	Lys	Ala	Gly	Asp	Val	He
				85					90					95	
Gln	Val	Leu	Glu	Ala	Ser	Asn	Lys	Asp	Trp	Trp	Trp	Gly	Arg	Ser	Glu
			100					105					110		
Asp	Lys	Glu	Ala	Trp	Phe	Pro	Ala	Ser	Phe	Val	Arg	Leu	Arg	Val	Asn
		115					120					125			
Gln	Glu	Glu	Leu	Ser	Glu	Asn	Ser	Ser	Ser	Thr	Pro	Ser	Glu	Glu	Gln
	130					135					140				
Asp	Glu	Glu	Ala	Ser	Gln	Ser	Arg	His	Arg	His	Cys	Glu	Asn	Lys	Gln
145					150					155					160
Gln	Met	Arg	Thr	Asn	Val	He	Arg	Glu	He	Met	Asp	Thr	Glu	Arg	Val
				165					170					175	
Tyr	11e	Lys	His	Leu	Arg	Asp	lle	Cys	Glu	Gly	Tyr	He	Arg	Gln	Cys
			180					185					190		
Arg	Lys	His	Thr	Gly	Met	Phe	Thr	Val	Ala	Gln	Leu	Ala	Thr	lle	Phe
		195					200					205			
Gly		He	Glu	Asp	He	Tyr	Lys	Phe	Gln	Arg		Phe	Leu	Lys	Asp
	210					215					220				
Leu	G]u	Lys	Gln	Tyr		Lys	Glu	Glu	Pro		Leu	Ser	Glu	He	
225					230					235					240
Ser	Cys	Phe	Leu	Gln	Asn	Gln	Glu	Gly		Ala	He	Tyr	Ser		Tyr
				245					250					255	
Cys	Asn	Asn		Pro	G]y	Ala	Cys		Glu	Leu	Ala	Asn		Met	Lys
			260					265					270		

Gln	Gly	Lys 275	Tyr	Arg	His	Phe	Phe 280	Glu	Ala	Cys	Arg	Leu 285	Leu	Gln	Gln
Met			lle	Ala	He	Asp		Phe	Leu	Leu			Val	G1n	Lys
He	290 Cys	Lys	Tyr	Pro	Leu	295 Gln	Leu	Ala	Glu	Leu	300 Leu	Lys	Tyr	Thr	Thr
305					310					315					320
Gln	Glu	His	Gly	Asp 325	Tyr	Ser	Asn	He	Lys 330	Ala	Ala	Tyr	Glu	Ala 335	Met
Lys	Asn	Val	Ala	Cys	Leu	Ile	Asn	Glu	Arg	Lys	Arg	Lys	Leu	Glu	Ser
			340					345					350		
Hle	Asp	Lys 355	He	Ala	Arg	Trp	G1n 360	Val	Ser	Ile	Val	Gly 365	Trp	Glu	Gly
Leu	Asp	He	Len	Asn	Arg	Ser	Ser	Glu	Len	He	His	Ser	Glv	Glu	Leu
	370				0	375					380			- 7 -	
Thr	Lys	Пе	Thr	Lys	Gln	Gly	Lys	Ser	Gln	Gln	Arg	Thr	Phe	Phe	Leu
385					390					395					400
Phe	Asp	His	Gln	Leu	Val	Ser	Cys	Lys	Lys	Asp	Leu	Leu	Arg	Arg	Asp
				405					410					415	
Met	Leu	Tyr	Tyr	Lys	Gly	Arg	Leu	Asp	Met	Asp	Glu	Met	Glu	Leu	Val
			420					425					430		
Asp	Leu	Gly	Asp	Gly	Arg	Asp	Lys	Asp	Cys	Asn	Leu	Ser	Val	Lys	Asn
		435					440					445			
Ala	Phe	Lys	Leu	Val	Ser	Arg	Thr	Thr	Asp	Glu	Val	Tyr	Leu	Phe	Cys
	450					455					460				
Ala	Lys	Lys	Gln	Glu	Asp	Lys	Ala	Arg	Trp	Leu	Gln	Ala	Cys	Ala	Asp
465					470					475					480
Glu	Arg	Arg	Arg	Val	Gln	G] u	Asp	Lys	Glu	Met	Gly	Met	Glu	He	Ser
				485					490					495	
Glu	Asn	Gln	Lys	Lys	Leu	Ala	Met	Leu	Asn	Ala	Gln	Lys	Ala	Gly	His
			500					505					510		
Gly	Lys	Ser	Lys	Gly	Tyr	Asn	Arg	Cys	Pro	Val	Ala	Pro	Pro	His	Gln
		515					520					525			
Gly	Leu	His	Pro	He	His	Gln	Arg	His	lle	Thr	Met	Pro	Thr	Ser	Val
	530					535					540				
Pro	Gln	Gln	Gln	Val	Phe	Gly	Leu	Ala	Glu	Pro	Lys	Arg	Lys	Ser	Ser
545					550					555					560

Leu Phe Trp His Thr Phe Asn Arg Leu Thr Pro Phe Arg Lys
565 570

<210> 3063 <211> 703 <212> PRT <213> Homo sapiens <400> 3063 Met Met Ala His Cys Arg Ile Asp Leu Leu Gly Ser Ser Asp Pro Pro Thr Ser Ala Ser Gln Ile Ala Glu Thr Thr Asp Val Ser His His Ala Gly Leu Ile Glu Phe Leu Ala Leu Ser Asn Ser Ser Ala Leu Ala Ser Arg Ser Val Glu Ile Thr Glu Ile Lys Leu Pro Val Glu Val Asp Ile Gly Leu Thr Gln Ala Glu Gly Pro Asp Glu Thr Lys Asn Thr Glu Pro Gln Met Gly Leu Val Ile Glu Pro Pro Gln Cys Gln Phe Ala Gln Gln His Glu Gln Arg Lys Glu Ala Gly Asn Ile Glu Ser Gly Val Glu Pro Pro Asp Arg Ile Arg Pro Ile Tyr Ser Gly Lys Phe Phe Asp Arg Thr Pro Cys Trp Pro Ser Ala Gly Lys Val lle Pro Val Gly Tyr Arg Val Ala Ser Cys Leu Thr Glu Lys Leu Pro Arg Leu Ile Thr Pro Pro Glu Ala Lys Lys Tyr Phe Asn Phe Arg Tyr Pro Pro Ala Gly Val Glu Arg Val Phe Tyr Gly Arg Ala Asn Asp Pro Gln lle Ala Pro Tyr Leu Thr His Gly 11e Arg Ser Lys I1e Ser Val Leu Ala Asn Thr Leu 11e Asn

Pro		Pro	11e	Inr	Ihr		GIn	GIn	Lys	11e		Asp	Lys	Lys	Glu
	210					215					220				
Ser	He	Tyr	Leu	Ser	Asn	Arg	Arg	Ala	Pro	Leu	Gly	Lys	Ser	His	Asp
225					230					235					240
Gln	Λla	Pro	Gly	Leu	Pro	Lys	Gly	Met	Asp	Thr	Thr	Asn	Thr	Thr	Phe
				245					250					255	
Gly	Thr	Ala	Val	lle	Lys	Glu	Tyr	Ser	Ala	Lys	Asp	Val	Val	Asn	Pro
			260					265					270		
Pro	Lys	Ser	Tyr	Glu	Glu	Val	Phe	Lys	Glu	Gly	Asn	Glu	Gly	His	Asp
		275					280					285			
Leu	Tyr	Val	Val	Ser	His	Asn	Asp	Tyr	Tyr	Ala	Gly	G]u	Ala	Lys	Asn
	290					295					300				
Arg	Lys	Tyr	Asn	Pro	Ser	Ser	Phe	His	Arg	Cys	Ser	Val	Tyr	Gly	Va]
305					310					315					320
Pro	Thr	Pro	His	Phe	Asn	Asp	G1 y	Arg	Ala	Met	Ala	Lys	Ser	Leu	Tyr
				325					330					335	
Trp	Leu	His	Glu	Leu	Gln	Met	Lys	Arg	Gly	Ala	Lys	Phe	Val	Ser	Lys
			340					345					350		
Arg	Ala	Asp	Asp	Phe	Lys	Glu	Lys	Phe	Gln	His	Lys	Leu	Gly	Arg	Val
		355					360					365			
Leu	Asp	Pro	He	Ala	Glu	Thr	Met	Asn	Val	Pro	Pro	Asp	Cys	Thr	Phe
	370					375					380				
Gly	Ala	Cys	Leu	Arg	Pro	Glu	Glu	Tyr	Gly	Val	Gly	Лsp	Leu	11e	His
385					390					395					400
Asn	Arg	Leu	Pro	Asp	Glu	Tyr	Leu	Arg	Gly	Lys	Asp	Arg	Gln	Arg	Ala
				405			,		410					415	
Leu	He	Ala	Ala	Val	Arg	His	His	Leu	Lys	Lys	Val	Asn	Tyr	Gln	Lys
			420					425					430		
Phe	Asp	Thr	Leu	Leu	Ala	Ala	Phe	Arg	His	Tyr	Asp	Lys	Lys	Gly	Asp
		435					440					445			
Gly	Met	He	Asp	Lys	Asp	Glu	Leu	Gln	Glu	Ala	Cys	Asp	Gln	Ala	Asn
	450					455					460				
Leu	Ser	Leu	Asp	Asp	Lys	Leu	Leu	Asp	Gln	Leu	Phe	Asp	Tyr	Cys	Asp
465					470					475					480
Val	Asp	Asn	Asp	Gly	Phe	He	Asn	Tyr	Leu	Glu	Phe	Ala	Asn	Phe	Leu

				485					490					495	
Asn	Cys	Lys	Asp	Lys	Met	Leu	Leu	Lys	Glu	Tyr	Glu	Glu	Arg	Val	lle
			500					505					510		
He	Lys	Gly	Arg	Lys	Pro	Asp	Cys	Val	Asn	Pro	Thr	Glu	Ala	Asn	Val
		515					520					525			
G] u	Glu	Pro	Glu	Gln	Thr	Leu	Leu	11e	Lys	Pro	Glu	Asp	lle	Val	Leu
	530					535					540				
Lys	Glu	Ala	Gly	Ser	Thr	Glu	Lys	Thr	Leu	Trp	Thr	Leu	Leu	Arg	Pro
545					550					555					560
Ser	Asp	Lys	Val	Ser	Asn	Tyr	Tyr	Lys	Thr	Thr	Ser	Ser	Glu	He	Asn
				565					570					575	
Ala	He	Val	Gly	Ala	He	Pro	Ser	Thr	Cys	Tyr	Pro	He	Cys	G] y	Val
			580					585					590		
Pro	Thr	He	Arg	Ser	Asp	Пе	Pro	Ala	Pro	Arg	He	Arg	Arg	Thr	Ser
		595					600					605			
Asp	Arg	Thr	Asn	Tyr	Gly	Glu	Glu	Gly	Ser	Ala	Tyr	Ser	Leu	Leu	Tyr
	610					615					620				
Pro	Thr	He	Phe	Ala	Arg	Lys	Gly	Val	Phe	Glu	Arg	Asp	Phe	Phe	Lys
625					630					635					640
Thr	Arg	Ser	Lys	Glu	Glu	Пe	Ala	Glu	11e	Leu	Cys	Asn	He	Gly	Val
				645					650					655	
Lys	Leu	Ser	Asp	Glu	Glu	Phe	Glu	Asn	Val	Trp	Asn	Leu	Ala	Ser	Lys
			660					665					670		
Lys	His	His	Arg	Gly	Glu	Val	Cys	Va]	Glu	Asn	lle	Arg	Asn	Val	Leu
		675					680					685			
Asp	Glu	Leu	Arg	His	Ala	Asp	Arg	lle	Lys	Cys	Lys	Thr	Leu	Met	
	690					695					700				

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3064

Met Met Glu Arg Asp Val Phe Ile Leu Phe Tyr Phe Phe Arg Gln

5 10 15 Ser Leu Ala Leu Ser Pro Ser Leu Glu Cys Asn Gly Thr lle Ser Ala 25 His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asn Ser Pro Ala Ser Ala 35 40 45 Ser His Val Ala Gly Ile Thr Gly Thr His His His Ala Arg Leu Ile 55 Phe Leu Phe Leu Val Glu Met Gly Phe His His Val Gly Gln Ala Gly 70 75 65 Leu Glu Leu Leu Thr Ser Gly Asp Leu Pro Ala Leu Ala Ser Gln Ser 90 85 Ala Gly Ile Thr Gly Val Ser His Arg Ala Arg Pro Leu Phe Tyr Phe 100 105 Leu Glu Met Val Leu Leu Cys His Pro Gly Trp Ser Ala Val Met Gln 115 120 125 Ser

<210> 3065

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3065

Met Cys Met Gly Gly Leu His Ala Gly Met Cys Val Ser Leu Cys Val

1 5 10 15

Cys Val Cys Ala Cys Val Cys Val His Val Gly 11e Cys Met His Ala 20 25 30

Cys Val Cys Leu Cys Met Cys Met Cys Val Cys Ala Cys Gly Asn Leu 35 40 45

His Ala Phe Leu Cys Val Phe Val Ser Val Tyr Thr Cys Met Gly Val
50 55 60

Phe Glu Cys Val His Leu Cys Val His Leu Phe Val Cys 11e Cys Val
65 70 75 80

Gly Ala Ser Ala Trp 11e Leu Val Cys 11e Cys Val Cys Ala His Val

				85					90					95	
Cys	Thr	Cys	Val	His	Ser	Phe	Val	Tyr	Val	Cys	Gly	Cys	Val	His	Val
			100					105					110		
G1 y	Met	Arg	Val	Tyr	Leu	Cys	Glu	His	Val	Arg	Met	Cys	Val	Ser	Leu
		115					120					125			
Cys	Ala	Cys	Leu	Cys	Val	Cys	He	His	Val	Arg	Val	Cys	lle	Tyr	Ala
	130					135					140				
Cys	lle	Leu	Val	Cys	Ala	Leu	Val	Cys	Met	His	He	Cys	Leu	Glu	Asp
145					150					155					160
Met	Ala	Leu	Pro	Gln	Gly	Leu	Gly	Thr	Leu	Pro	Cys	Leu	Pro	Cys	Pro
				165					170					175	
Ala	Leu	Pro	Cys	Pro	Glu	Val	Trp	Gly	Thr	Trp	Pro	Cys	Ser	Gly	Val
			180					185					190		
Trp	Gly	Thr	Leu	Pro	Trp	Ala	Pro	Ala	Cys	Pro	Gly	Pro	Leu	${\tt Pro}$	Ala
		195					200					205			
Leu	Ala	Ala	His	Leu	Ala	Leu	G1 y	Pro	Ala	Glu	Trp	Asn	Leu	Gln	Pro
	210					215					220				
Leu	His	Gly	Leu	Asp	His	Gly	Pro	His	Gly	His	Glu	Asp	Val	Leu	Val
225					230					235					240
Asp	Gln	Gly	Pro	Glu	Ala	Leu	Ala	Leu	Leu	Leu	Arg	Val	Ala	Gly	Ala
				245					250					255	
Val	Asp	Asp	Pro	His	Leu	Leu	Asp	Glu	Asp	Glu	Thr	Arg	Arg	Thr	Arg
			260					265					270		
Glu	Val														

<211> 238

<212> PRT

<213> Homo sapiens

<400> 3066

Met Ala Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser I 5 10 15 Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Leu Gln Ser Cys

			20					25					30		
Ala	Thr	Ala	Ser	Arg	Leu	Leu	Phe	Phe	Phe	Leu	Leu	Ser	Ser	Val	Phe
		35					40					45			
Phe	Tyr	Pro	Thr	Ser	Leu	Pro	Leu	Ser	Ser	Leu	Leu	Pro	Pro	Phe	Pro
	50					55					60				
Phe	Ser	Ser	Leu	Leu	Pro	Pro	Ser	Cys	Phe	Ser	Pro	Ser	Phe	Pro	Leu
65					70					75					80
Pro	Ser	Phe	Leu	Phe	Leu	Pro	Phe	Pro	Val	Cys	Leu	Pro	Pro	Leu	Phe
				85					90					95	
Leu	Ser	Cys	Leu	Pro	Val	Ser	Phe	Ala	Leu	Phe	Leu	Pro	Phe	Ser	Arg
			100					105					110		
Pro	Ser	Leu	Pro	Ala	Phe	Leu	Phe	Thr	Ser	Phe	Pro	Ser	His	Cys	Phe
		115					120					125			
Leu	Ala	Phe	Pro	Ala	Phe	Pro	Cys	Leu	Ser	Leu	Ser	Phe	Leu	Pro	Phe
	130					135					140				
Pro	Ala	Ser	Leu	Phe	Pro	Ala	Phe	Pro	His	Leu	Ser	Leu	Ser	Cys	Leu
145					150					155					160
Ser	Leu	Ser	Leu	Pro	Phe	Phe	Pro	Ser	Pro	Pro	Thr	Leu	Pro	Pro	Ser
				165					170					175	
Ser	Leu	Leu	Phe	Phe	Pro	Leu	Leu	Ser	Leu	Cys	Leu	Ser	Phe	Phe	Phe
			180					185					190		
Pro	Ser	Leu	Phe	Leu	Phe	Ser	Pro	Cys	Val	Phe	Leu	Ala	Leu	Val	Phe
		195					200					205			
Pro	Phe	Ser	Pro	Leu	Cys	Thr	Glu	Lys	Met	Thr	Val	Pro	Gly	Cys	Gly
	210					215					220				
Trp	Ala	Gly	Val	Thr	Arg	Pro	Arg	Glu	Arg	Gly	His	Pro	Gly		
225					230					235					

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3067

Met Asn Glu Gly Thr Val Gly Gly Lys Pro Arg Glu Asn Phe Gly Tyr

1				5					10					15	
Ser	Asp	Glu	Gly	Ser	Gly	Glu	Cys	Gly	Glu	Arg	Gln	Ala	Arg	Лlа	Arg
			20					25					30		
Cys	Ser	Arg	Leu	Phe	Pro	Val	Pro	Ala	Ser	Arg	Leu	Ala	His	Ala	Ser
		35					40					45			
Leu	Pro	Pro	Glu	Ile	Val	Gln	Arg	Arg	Arg	Asp	Pro	Gly	Gly	Ala	Leu
	50					55					60				
Arg	Met	Pro	Phe	Arg	Lys	Leu	Leu	Leu	Pro	Arg	Ala	Trp	Gly	Leu	Trp
65					70					75					80
Cys	Ser	Gly	Met	Gly	Cys	Asp	Ala	Gly	Leu	Gln	Gln	Gly	Leu	Arg	Pro
				85					90					95	
Leu	His	Val	Cys	His	Lys	His	Phe	Leu	Val	Leu	Arg	Ser	Arg	Pro	Gly
			100					105					110		
Cys	Ser	Leu	Pro	Arg	Ala	Val	Leu	Ser	Gln	His	Pro	Gln	Glu	Gly	Arg
		115					120					125			
Pro	Gln	Ala	Glu	Lys	Pro	Ala	Gly	Ala	Tyr	Cys	Pro	Glu	Trp	Ala	Ser
	130					135					140				
Asn	Pro	Pro	Leu	Leu	Gly	Phe	Trp	Gly	Gln	Gly	Pro	Val	His	Lys	Pro
145					150					155					160
Leu	Gln	Val	Pro	Pro	Ser	Gly	Leu	Pro	Ser	Pro	Gln	G1 y	Trp	Pro	Arg
				165					170					175	
Glu	Arg	Leu	Ser	Glu	Asp	Cys	Leu	Leu	His	Pro	G1y	G1y	Ser	Ala	Pro
			180					185					190		
Arg	Ala	Gly	Pro	Pro	Gln	Gly	Gln	Gly	Val	Pro	Gln	Ala	Gly	Pro	Gln
		195					200					205			
Gly	Leu	Ser	Arg	Gly	Thr	Ala	Gly	Gly	Ser	Pro	Leu	G] y	Arg	Glu	Glu
	210					215					220				
Asn	Leu	Ala	Pro	Gln	Leu	Ala	Ala	Ser							
225					230										

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3068 Met Leu Gln Leu Ile Arg Ala Ile Leu Lys Val Pro Glu Asp Pro Thr Gln Cys Phe Leu Leu Phe Ala Asn Gln Thr Glu Lys Asp Ile lle Leu Arg Glu Asp Leu Glu Glu Leu Gln Ala Arg Tyr Pro Asn Arg Phe Lys Leu Trp Phe Thr Leu Asp His Pro Pro Lys Gly 11e Leu Pro 11e Ser Gly His Pro Thr Ile Pro Ser Ser Ser Lys Ser Lys Pro Cys Pro Phe Val Asn Ser Gly Phe Ile Glu Ile Asn Leu Ala Ser His Cys Gln Leu Gly Ser Leu Ser Ala Gln Thr Gln <210> 3069 <211> 163 <212> PRT <213> Homo sapiens <400> 3069 Met Val Ser Asn Ser Ile Ser Tyr His Leu Pro Val Ser Leu Gln Asp

Pro Cys Ser Gln Ile Pro Ser Arg Ser Ile Cys Leu Cys His Ser Arg Thr His Gly Leu Lys Phe Cys Phe Leu Pro Ser Ala Cys Ala Ile Ala Gly Pro Met Val Thr Asn Ser lle Ser Tyr His Leu Pro Val Ser Leu Gln Asp Pro Cys Ser Gln Ile Pro Ser Arg Ser Ile Cys Leu Cys His Ser Arg Thr His Gly His Lys Phe His Leu Leu Pro Ser Ala Cys Ala Ile Ala Gly Pro Met Val Thr Asn Ser Ile Ser Tyr His Leu Pro Val

Ser Leu Gln Asp Pro Cys Ser Gln Ile Pro Ser Arg Thr Ile Cys Leu Cys His Ser Arg Thr His Gly His Lys Phe His Leu Leu Pro Ser Ala Cys Val Ile Ala Gly Ser Met Val Thr Asn Ser Ile Ser Tyr His Leu Pro Val Pro <210> 3070 <211> 116 <212> PRT <213> Homo sapiens <400> 3070 Met Asn Ser Cys Gln Glu His Cys Leu His Lys Gly Arg Ser Leu Pro Asp Leu Arg Thr Gln Gln Asn Phe Tyr Phe Val Lys Asn Leu Ile Phe Ser Leu His His Ser Phe Gln Val Asn lle Gln Gln Ser Ala Phe Gln Phe Arg Glu Met Phe Thr Val Val Trp Phe Ser Leu Phe Leu Gly Thr Arg Leu Pro His Leu Glu His lle Thr Ser Ala Lys Leu Ser Ile Pro Lys Gln Tyr Arg Phe Leu Leu Leu Ser Arg Ser Ser Gly Cys Gly Arg Gln Thr Phe Gln Asn Cys Leu Pro Ser Phe Pro Pro Pro Glu Met His Ala Phe Val

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<210> 3071
<211> 282
<212> PRT
<213> Homo sapiens
<400> 3071
Met Gly Arg Arg Leu His Ser Ala His Asp Pro Gly Leu Ser Lys Thr
                                     10
Ser Thr Ala Glu Met Glu His Gly Leu His Glu Ala Arg Thr Val Arg
             20
                                 25
                                                      30
Thr Ser Gln Asp Ser Ser Asn Val Arg Lys Pro Leu Glu Thr Gly His
                             40
Arg Cys Ser Ser Ser Ser Leu Pro Val Ile His Asp Pro Ser Val
    50
                         55
Phe Leu Leu Gly Pro Gln Leu Tyr Leu Pro Gln Pro Gln Phe Leu Ser
Pro Asp Val Leu Met Pro Thr Met Ala Gly Glu Pro Asn Arg Leu Pro
                 85
                                     90
Gly Thr Ser Arg Ser Val Gln Gln Phe Leu Ala Met Cys Asp Arg Gly
            100
                                105
                                                     110
Glu Thr Ser Gln Gly Ala Lys Tyr Thr Gly Arg Thr Leu Asn Tyr Gln
                            120
Ser Leu Pro His Arg Ser Arg Thr Asp Asn Ser Trp Ala Pro Trp Ser
    130
                        135
Glu Thr Asn Gln His Ile Gly Thr Arg Phe Leu Thr Thr Pro Gly Cys
                                        155
                    150
Asn Pro Gln Leu Thr Tyr Thr Ala Thr Leu Pro Glu Arg Ser Lys Gly
                165
                                    170
Leu Gln Val Pro His Thr Gln Ser Trp Ser Asp Leu Phe His Ser Pro
            180
                                185
                                                     190
Ser His Pro Pro 11e Val His Pro Val Tyr Pro Pro Ser Ser Ser Leu
                            200
His Val Pro Leu Arg Ser Ala Trp Asn Ser Asp Pro Val Pro Gly Ser
   210
                        215
                                            220
Arg Thr Pro Gly Pro Arg Arg Val Asp Met Pro Pro Asp Asp Asp Trp
```

 Arg Gln Ser Ser Tyr Ala Ser His Ser Gly His Arg Arg Thr Val Gly

 245
 250
 255

 Glu Gly Phe Leu Phe Val Leu Ser Asp Ala Pro Arg Arg Glu Gln Ile
 260
 265
 270

 Arg Ala Arg Val Leu Gln His Ser Gln Trp
 280
 280

<210> 3072

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3072

Met Asp Gly Leu Pro Ser His Arg Pro Val Ile Glu Leu Cys Ile Pro 1 5 10 15

Ser Ser Leu Asp Pro Thr Leu Ala Pro Pro Gly Cys His Val Val Ser 20 25 30

Leu Phe Thr Gln Tyr Thr Pro Tyr Thr Leu Ala Gly Gly Lys Ala Trp 35 40 45

Asp Glu Gln Glu Arg Asp Ala Tyr Ala Asp Arg Val Phe Asp Cys Ile 50 55 60

Glu Val Tyr Ala Pro Gly Phe Lys Asp Ser Val Val Gly Arg Asp 11e 65 70 75 80

Leu Thr Pro Pro Asp Leu Glu Arg 11e Phe Gly Leu Pro Gly Gly Lys
85 90 95

Ile Ser Trp Lys Glu Lys Asn Ile Cys 100 105

<210> 3073

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3073

Met Lys Arg Pro Ser Pro Gly Leu Pro Leu Ser Pro Phe Pro Ser Pro Leu His Ser Trp Ser Thr Ser Trp Lys Asn Thr Ser Trp Gly Ala Ala 25 Phe Pro Ser Lys Arg Trp Gly Leu His Ser Gln Pro Ala Ile Arg Lys 40 Leu Asn Arg Ser Ser Pro Arg Ser Arg Val Ser Thr Gly Arg Ala Arg 55 60 Val Asp Gln Leu Cys Ser Ser Gly Thr Asn Pro Pro Tyr Met Pro Gly 65 70 75 80 Leu Glu Ala Phe Gly Phe Val Asp Ala Lys Ser Gly Trp Ser Arg Leu 90 85 95 Leu His Pro Asp Ser Pro Ala Ser Pro Phe 100 105

<210> 3074

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3074

Met Ser Ser Arg Glu Leu Lys Arg Arg Phe Glu Val Phe Gly Glu Ile 1 5 10 15

Glu Glu Cys Glu Val Leu Thr Arg Asn Arg Arg Gly Glu Lys Tyr Gly
20 25 30

Phe lle Thr Tyr Arg Cys Ser Glu His Ala Ala Leu Ser Leu Thr Lys 35 40 45

Gly Ala Ala Leu Arg Lys Arg Asn Glu Pro Ser Phe Gln Leu Ser Tyr 50 55 60

Gly Gly Leu Arg His Phe Cys Trp Pro Arg Tyr Thr Asp Tyr Gly Lys
65 70 75 80

Pro Leu Lys Pro Ser His Ser Leu Val Arg Leu Lys Ala Trp Glu Ala 85 90 95

Val Pro Ser Leu Asn Lys Thr Gln Ser

<210> 3075 <211> 187 <212> PRT <213> Homo sapiens <400> 3075 Met Ala Tyr Glu Val Tyr Tyr Gly Leu Thr Glu Glu Glu Gly Ala Val Pro Ala Glu His Gln Val Ala Met Ala Ala Ala Arg Ala Leu Gly Asp Val Thr Val Leu Gly Ser Leu Leu Leu Gln His Leu Leu His Phe Ser Thr Pro Gly Leu Val Leu Arg Ser Leu Gly Ala Leu Thr Gly Pro Gln Leu Leu Ser Leu Ala Gln Ser Pro Ala Gly Ser His Val Leu Asp Ala Ile Leu Thr Ser Pro Ser Val Thr Arg Lys Leu Arg Arg Arg Val Leu Gln Asn Leu Lys Gly Gln Tyr Val Ala Leu Ala Cys Ser Arg His Gly Ser Arg Val Leu Asp Ala Ile Trp Ser Gly Ala Ala Leu Arg Ala Arg Lys Glu Ile Ala Ala Glu Leu Gly Glu Gln Asn Gln Glu Leu Ile Arg Asp Pro Phe Gly His His Val Ala Arg Asn Val Ala Leu Thr Thr Phe Leu Lys Arg Arg Glu Ala Trp Glu Gln Gln Gln Gly Ala Val Ala Lys

<210> 3076

Arg Arg Arg Ala Leu Asn Ser Ile Leu Glu Asp

<211> 565

<213> Homo sapiens <400> 3076 Met Asp Val Val Phe Leu Ile Asp Asn Ser Arg Asn Ile Ala Lys Asp Glu Phe Lys Ala Val Lys Ala Leu Val Ser Ser Val Ile Asp Asn Phe Asn Ile Ala Ser Asp Pro Leu Ile Ser Asp Ser Gly Asp Arg Ile Ala Leu Leu Ser Tyr Ser Pro Trp Glu Ser Ser Arg Arg Lys Met Gly Thr Val Lys Thr Glu Phe Asp Phe Ile Thr Tyr Asp Asn Gln Leu Leu Met Lys Asn His lle Gln Thr Ser Phe Gln Gln Leu Asn Gly Glu Ala Thr Ile Gly Arg Ala Leu Leu Trp Thr Thr Glu Asn Leu Phe Pro Glu Thr Pro Tyr Leu Arg Lys His Lys Val Ile Phe Val Val Ser Ala Gly Glu Asn Tyr Glu Arg Lys Glu Phe Val Lys Met Met Ala Leu Arg Ala Lys Cys Gln Gly Tyr Val Ile Phe Val Ile Ser Leu Gly Ser Thr Arg Lys Asp Asp Met Glu Glu Leu Ala Ser Tyr Pro Leu Asp Gln His Leu Ile Gln Leu Gly Arg lle His Lys Pro Asp Leu Asn Tyr lle Ala Lys Phe Leu Lys Pro Phe Leu Tyr Ser Val Arg Arg Gly Phe Asn Gln Tyr Pro Pro Pro Met Leu Glu Asp Ala Cys Arg Leu Ile Asn Leu Gly Gly Glu Asn Ile Arg Asn Asp Gly Phe Gln Phe Val Thr Glu Leu Gln Glu Asp

Phe Leu Gly Asp Asn Gly Phe 11e Gly Gln Glu Leu Asn Ser Gly Arg

<212> PRT

Glu	Ser	Pro	Phe	Val	Lys	Thr	Glu	Asp	Asn	Gly	Ser	Asp	Tyr	Leu	Val
			260					265					270		
Tyr	Leu	Pro	Ser	Gln	Met	Phe	Glu	Pro	Gln	Lys	Leu	Met	lle	Asn	Tyr
		275					280					285			
Glu	Lys	Asp	Gln	Lys	Ser	Ala	Glu	lle	Ala	Ser	Leu	Thr	Ser	Gly	His
	290					295					300				
Glu	Asn	Tyr	Gly	Arg	Lys	Glu	Glu	Pro	Asp	His	Thr	Tyr	Glu	Pro	Gly
305					310					315					320
Asp	Val	Ser	Leu	Gln	Glu	Tyr	Tyr	Met	Asp	Val	Ala	Phe	Leu	Ile	Asp
				325					330					335	
Ala	Ser	Gln	Arg	Val	Gly	Ser	Asp	Glu	Phe	Lys	Glu	Val	Lys	Ala	Phe
			340					345					350		
He	Thr	Ser	Val	Leu	Asp	Tyr	Phe	His	He	Ala	Pro	Thr	Pro	Leu	Thr
		355					360					365			
Ser	Thr	Leu	Gly	Asp	Arg	Val	Ala	Val	Leu	Ser	Tyr	Ser	Pro	Pro	Gly
	370					375					380				
Tyr	Met	Pro	Asn	Thr	Glu	Glu	Cys	Pro	Val	Tyr	Leu	Glu	Phe	Asp	Leu
385					390					395					400
Val	Thr	Tyr	Asn	Ser	Ile	His	Gln	Met	Lys	His	His	Leu	Gln	Asp	Ser
				405					410					415	
Gln	Gln	Leu	Asn	Gly	Asp	Val	Phe	He	Gly	His	Ala	Leu	Gln	Trp	Thr
			420					425					430		
He	Asp	Asn	Val	Phe	Val	Gly	Thr	Pro	Asn	Leu	Arg	Lys	Asn	Lys	Val
		435					440					445			
lle	Phe	Val	He	Ser	Ala	Gly	G] u	Thr	Asn	Ser	Leu	Asp	Lys	Asp	Val
	450					455					460				
Leu	Arg	Asn	Val	Ser	Leu	Arg	Ala	Lys	Cys	Gln	Gly	Tyr	Ser	He	Phe
465					470					475					480
Val	Phe	Ser	Phe	Gly	Pro	Lys	His	Asn	Asp	Lys	Glu	Leu	Glu	Glu	Leu
				485					490					495	
Ala	Ser	His	Pro	Leu	Asp	His	His	Leu	Val	Gln	Leu	Gly	Arg	Thr	His
			500					505					510		
Lys	Pro	Asp	Trp	Asn	Tyr	He	11e	Lys	Phe	Val	Lys	Pro	Phe	Val	His
		515					520					525			
Leu	Пe	Arg	Arg	Ala	lle	Asn	Lys	Tyr	Pro	Thr	Glu	Asp	Met	Lys	Ala
	530					535					540				

Thr Cys Val Asn Met Thr Ser Pro Asn Pro Glu Asn Gly Gly Thr Glu
545 550 555 560
Asn Thr Val Leu Trp
565

<210> 3077

<211> 304

<212> PRT

<213> Homo sapiens

<400> 3077

Met Gly Gln Cys Val Thr Lys Cys Lys Asn Pro Ser Ser Thr Leu Gly

1 5 10 15

Ser Lys Asn Gly Asp Arg Glu Pro Ser Asn Lys Ser His Ser Arg Arg
20 25 30

Gly Ala Gly His Arg Glu Glu Gln Val Pro Pro Cys Gly Lys Pro Gly
35 40 45

Gly Asp Ile Leu Val Asn Gly Thr Lys Lys Ala Glu Ala Ala Thr Glu 50 55 60

Ala Cys Gln Leu Pro Thr Ser Ser Gly Asp Ala Gly Arg Glu Ser Lys
65 70 75 80

Ser Asn Ala Glu Glu Ser Ser Leu Gln Arg Leu Glu Glu Leu Phe Arg

85 90 95

Arg Tyr Lys Asp Glu Arg Glu Asp Ala IIe Leu Glu Glu Gly Met Glu
100 105 110

Arg Phe Cys Asn Asp Leu Cys Val Asp Pro Thr Glu Phe Arg Val Leu 115 120 125

Leu Leu Ala Trp Lys Phe Gln Ala Ala Thr Met Cys Lys Phe Thr Arg 130 135 140

165 170 175

Asp Lys Phe Lys Asp Leu Tyr Arg Phe Thr Phe Gln Phe Gly Leu Asp

			180					185					190		
Ser	Glu	Glu	Gly	Gln	Arg	Ser	Leu	His	Arg	Glu	lle	Ala	Ile	Ala	Leu
		195					200					205			
Trp	Lys	Leu	Val	Phe	Thr	Gln	Asn	Asn	Pro	Pro	Val	Leu	Лѕр	Gln	Trp
	210					215					220				
Leu	Asn	Phe	Leu	Thr	Glu	Asn	Pro	Ser	Gly	lle	Lys	Gly	Ile	Ser	Arg
225					230					235					240
Asp	Thr	Trp	Asn	Met	Phe	Leu	Asn	Phe	Thr	Gln	Val	lle	Gly	Pro	Asp
				245					250					255	
Leu	Ser	Asn	Tyr	Ser	Glu	Asp	Glu	Ala	Trp	Pro	Ser	Leu	Phe	Asp	Thr
			260					265					270		
Phe	Val	Glu	Trp	Glu	Met	Glu	Arg	Arg	Lys	Arg	Glu	Gly	Glu	Gly	Arg
		275					280					285			
Gly	Ala	Leu	Ser	Ser	Gly	Pro	Glu	Gly	Leu	Cys	Pro	Glu	Glu	Gln	Thr
	290					295					300				

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3078

Met Ser Arg Thr Thr Ala Gly Pro Thr Leu Ser Arg Glu Gln Gly Ala
1 5 10 15

Ala Leu Ser Cys Leu Leu Leu Glu Pro Ala Lys Asp Glu Ala Met Pro 20 25 30

Gln Leu Pro Leu Arg Ser Thr Gln Cys Trp Pro His Arg Pro Thr Gln 35 40 45

Gly Ala Glu Leu Ser Pro Gly Ala His Gly Ala Gly Gln Arg Gln Arg
50 55 60

Pro Leu Gly Arg Ser Ala Gln Ser Trp Val Gly Pro Ala Ser Gly Thr
65 70 75 80

Leu Arg Pro Pro His Pro Pro Asp Leu Leu Ser Arg Arg Asn Pro Thr
85 90 95

Arg Ala Ala Pro Ser Ala Pro Pro Ser Arg Asp Lys Leu Thr Ser Asp

Asn Asp Phe 11e Leu Thr Tyr Leu I1e Thr Ala Ala Pro Pro Ser 115

Ser Leu Ser Arg Glu Gln Thr Leu Trp Pro Ala Pro Asp Ser Ala Pro 130

Thr Pro Ser Ala Asn Leu Lys Gly Asn Lys Tyr Lys Leu Tyr Lys 145

<210> 3079

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3079

Met Phe Pro Phe Cys Ile Ser His Thr Arg Asp Pro Lys Val Cys Leu

1 5 10 15

Pro His Phe Asn Trp Gly Gly Leu Asp Lys Val Glu Phe Gln Leu Gln
20 25 30

Glu Thr Gly Cys Asp Met Gly Glu Val Pro Lys Ala His Arg Leu Lys 35 40 45

Leu Arg Trp Leu Phe Pro Val Ser Leu Cys Arg Ala Pro Leu Leu Ser 50 55 60

Thr Ala His Leu Ala Leu Leu Leu Pro Ser Cys Leu Leu Cys Ser Ser 65 70 75 80

Cys Tyr Tyr Phe Pro Phe Leu Ser Leu Leu Pro Pro Trp Pro Asn Leu 85 90 95

Phe His Arg Asn lle Thr Gly Pro Ala Arg His Ser Gly Ser Pro Leu 100 105 110

<210> 3080

<211> 295

<212> PRT

<213> Homo sapiens

<400)> 30	080													
Met	Gly	Glu	Trp	Ala	Phe	Leu	Gly	Ser	Leu	Leu	Asp	Ala	Val	Gln	Leu
l				5					10					15	
G1n	Ser	Pro	Leu	Val	Gly	Arg	Leu	Trp	Leu	Val	Val	Met	Leu	lle	Phe
			20					25					30		
Arg	He	Leu	Val	Leu	Ala	Thr	Val	Gly	Gly	Ala	Val	Phe	Glu	Asp	Glu
		35					40					45			
Gln	Glu	Glu	Phe	Val	Cys	Asn	Thr	Leu	Gln	Pro	Gly	Cys	Arg	Gln	Thr
	50					55					60				
Cys	Tyr	Asp	Arg	Ala	Phe	Pro	Val	Ser	His	Tyr	Arg	Phe	Trp	Leu	Phe
65					70					75					80
His	lle	Leu	Leu	Leu	Ser	Ala	Pro	Pro	Val	Leu	Phe	Val	Val	Tyr	Ser
				85					90				•	95	
Met	His	Arg	Ala	Gly	Lys	G1u	Ala	Gly	Gly	Ala	Glu	Ala	Ala	Ala	Gln
			100					105					110		
Cys	Ala	Pro	Gly	Leu	Pro	Glu	Ala	Gln	Cys	Ala	Pro	Cys	Ala	Leu	Arg
		115					120					125			
Ala		Arg	Ala	Arg	Arg		Tyr	Leu	Leu	Ser		Ala	Leu	Arg	Leu
	130					135					140				
	Ala	Glu	Leu	Thr		Leu	Gly	G1 y	Gln		Leu	Leu	Tyr	Gly	
145			_		150		_			155					160
Arg	Val	Ala	Pro		Phe	Ala	Cys	Ala		Pro	Pro	Cys	Pro		Thr
17 3		C	101	165	C		ь	TI	170		TI	v. 1	131	175	
val	Asp	Cys	Phe	val	Ser	Arg	Pro		Glu	Lys	Inr	val		val	Leu
DI	т	DI	180	Ve 1	C1.	1	1	185	۸1.	1	Levi	C ~ ~	190	۸1.	C1
rne	ıyr		Ala	rai	GIY	Leu	200	ser	ита	Leu	Leu	Ser 205	val	W19	GIU
Len	Glv	195 His	Leu	Leu	Ten	lve		Ara	Pro	Ara	Ala		6111	Ara	Aen
Leu	210	1112	Leu	Leu	пр	215	Oly	лд	110	m g	220	OIŸ	Oju	шв	ռթի
Asn		Cvs	Asn	Arø	-		Glu	Glu	Ala	Gln		Len	l.eu	Pro	Pro
225	111 5	0,3	11311	8	230	111.3	Gju	.,u	,11 U	235	25,0				240
	Pro	Pro	Pro	Pro		Val	Val	Thr	Tro		Glu	Asn	Arg	His	
	0			245	, 10				250		5.1 u		8	255	
Gln	G] v	Glu	G] y		Pro	Glv	Ser	Pro		Pro	Lvs	Thr	Glu	_	Asp
	,	••	260					265					270		1-
Ala	Pro	Ara	Pho	Ara	Ara	Glo	Sor		Sor	Pro	Ala	Glv		Hie	Cve

275 280 285

Ser Leu Pro Phe His Gly Thr
290 295

<210> 3081

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3081

Met Phe Ser Ser Phe Arg Phe Leu Tyr Lys Ala Lys Met Ser Phe Pro 1 5 10 15

Ser 11e Thr Lys Ser Ser Tyr Gly Tyr 11e Asn Pro Lys Ser Pro Leu 20 25 30

Leu Leu Lys Gly Tyr Asp Gln Val 11e Thr Cys Thr Leu Leu Pro Pro
35 40 45

Thr Leu Pro Ser Ser Leu Asn Lys His Val Ala Gln Trp Phe Pro Asn 50 55 60

Leu Ala Ala His Ser Tyr Gln Ser Pro Gly Asp Phe Phe Lys 11e Leu 65 70 75 80

Met Pro Asn Leu His Ser Thr Leu IIe Asn Met Ser Arg Ser Gly Ser 85 90 95

Leu Thr Asp Thr Thr Ile Lys Lys Lys Ile Pro Lys Met Ile Pro
100 105 110

lle Asp Asn Lys Val Glu Glu Pro Leu Ala His Pro Lys Leu Arg Tyr 115 120 125

Lys Val Lys Trp Pro Phe 130

<210> 3082

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3082

Met Cys Thr Trp Gly Gln Asp Leu Arg Pro Thr Ser Trp Thr Ala Ala 10 Ser Thr His Gly Leu Arg Glu Lys Val Pro Cys Cys Arg Leu Trp Gly 20 25 Thr Ser Ala Leu Thr Val Ala Met Pro Glu Lys Ala Pro Pro Asp Leu 40 Pro Thr Trp Pro Ala Cys Pro Val Arg Arg Ala Gly Trp Gly Trp Cys 50 55 Trp Leu Gln Met Ile Leu Lys Gly Thr Ala Arg Lys Pro Pro Gly Ala 75 70 Pro Pro Ala Ala Gly Ser Glu Arg Gly Thr Gly Ser Leu Ala Pro Ser 90 Arg Ser Val Ser Thr Arg Ala Thr Pro Val Thr Cys Arg Arg Gly Arg 100 105 110 Gln Thr Arg Ser Gly Pro Ala Pro Glu Gly Ala Ser Cys Arg Trp His 120 125 Lys Gly Val Ile Cys Ile Leu Val Lys Gly Glu Pro Thr Cys Leu Leu 130 135 Gln Val Gly Asn Thr Pro Trp Arg Pro Trp Cys Gly Ala Ser Thr Arg 150 155 Ala Ser Ser Ser Ser Ala Ala Gly Pro Trp Glu Gly Thr Gly Pro 165 170 Ala Pro Val Gln Pro Gly 180 <210> 3083 <211> 109 <212> PRT <213> Homo sapiens <400> 3083 Met Glu Glu Gly Asn Pro Phe 11e Arg Leu Pro Lys Thr Ser Val Asp 1 5 10 15

Gly lle Leu lle lle Tyr Cys Leu Ser Gln lle Ser His His Arg Cys

	20								25			30					
	Leu	Pro	Thr	Val	Ser	His	Leu	Leu	Lys	Phe	Leu	Ser	His	Ser	Phe	Ser	
		35						40					45				
	Thr	Val	Phe	Phe	Pro	Thr	Thr	Phe	Leu	Pro	Asp	His	Val	Ser	Gly	Pro	
		50					55					60					
	Leu	Met	Arg	Ser	Lys	Ser	Thr	Arg	Gly	Ser	Lys	Arg	lle	Leu	He	Thr	
	65					70					75					80	
	Lys	Arg	Ser	Glu	Trp	Pro	Lys	Thr	Leu	Leu	Leu	Ser	His	Gly	Tyr	Cys	
					85					90					95		
	Asp	Leu	Thr	Phe	Val	Leu	Tyr	Leu	Leu	He	Pro	Asp	Cys				
				100					105								
	<210)> 3(084														
	<211	> 10)5														
	<212	2> PI	T7														
	<213	3> Ho	omo s	sapi	ens												
	<400)> 30	084														
	Met	Arg	Gly	Pro	Gln	Trp	Gly	He	Leu	Val	lle	Leu	Glu	Thr	Gly	11€	
	1				5					10					15		
	Phe	His	Ser	Cys	Val	Lys	Met	Gln	Leu	Phe	Phe	Cys	Leu	Пе	Val	Arg	
				20					25					30			
	Thr	His	Asn	Pro	Lys	Leu	He	Leu	His	Tyr	Arg	He	Leu	Pro	Asp	Phe	
35					40						45						

lle Ser Lys Asn Pro Trp Cys Ser lle Ser Phe Ser Ser Leu His Pro

lle Gln Ser Cys Gly lle Gly Lys Cys Ser Cys His Gly Val Glu Lys

Pro Glu Val Cys Gln Ala Leu Glu Ala Pro Arg Ser Thr Met Pro Lys

60

95

75

90

55

70

100 105

85

Val Thr Asn Phe Pro Glu Val Ala Glu

<211> 784 <212> PRT <213> Homo sapiens <400> 3085 Met Thr lle Val Pro Thr Thr Asp Ile Glu Pro Val Thr Val Arg Thr Glu Ala Thr Val Thr Thr Leu Ala Pro Lys Thr Ser Gln Arg Thr Arg Thr Arg Arg Pro Arg Pro Lys His Lys Thr Thr Pro Arg Pro Glu Thr Leu Gln Thr Lys Leu Asp Phe Gly Pro Ile Thr Pro Gly Thr Ser Ser Ala Pro Thr Thr Thr Lys Arg Thr Arg Arg Pro His Pro Lys Pro Lys Thr Thr Pro His Pro Glu Val Pro Gln Thr Lys Leu Ala Pro Lys Val Pro Gln Arg Thr His Arg Pro His Pro Lys Pro Lys Thr Thr Leu Ser Pro Glu Glu Leu Gln Thr Glu Leu Val Pro Val Thr Asp Leu Gly Pro Val Thr Phe Arg Thr Glu Ile Pro Ala Thr Thr Leu Ala Thr Lys Thr Ser Lys Arg Thr Arg Pro Pro Arg Pro Arg Pro Lys Thr Thr Pro Ser Pro Gln Ala Pro Glu Thr Lys Pro Val Pro Ala Thr Val Leu Glu Pro Val Thr Leu Arg Pro Glu Ala Ser Thr Thr Leu Ala Ser Lys Thr Ser Gln Arg Thr Arg Arg Pro Arg Leu Arg Thr Lys Thr Thr Pro Arg Pro Glu Ala Pro Glu Ser Lys Pro Ala Pro Lys Gln Thr Pro Arg Ala Pro Pro Lys Pro Lys Thr Ser Pro Arg Pro Arg Ile Pro Gln Thr Gln

Pro Val Pro Lys Val Pro Gln Arg Val Thr Ala Lys Pro Lys Thr Ser

				245					250					255	
Pro	Ser	Pro	Glu	Val	Ser	Tyr	Thr	Thr	Pro	Ala	Pro	Lys	Asp	Val	Leu
			260					265					270		
Leu	Pro	His	Lys	Pro	Tyr	Pro	Glu	Val	Ser	Gln	Ser	Glu	Pro	Ala	Pro
		275					280					285			
Leu	Glu	Thr	Arg	Gly	He	Pro	Phe	He	Pro	Met	He	Ser	Pro	Ser	Pro
	290					295					300				
Ser	Gln	Glu	Glu	Leu	Gln	Thr	Thr	Leu	Glu	Glu	Thr	Asp	Gln	Ser	Thr
305					310					315					320
Gln	Glu	Pro	Phe	Thr	Thr	Lys	Ile	Pro	Arg	Thr	Thr	Glu	Leu	Ala	Lys
				325					330					335	
Thr	Thr	Gln	Ala	Pro	His	Arg	Phe	Tyr	Thr	Thr	Val	Arg	Pro	Arg	Thr
			340					345					350		
Ser	Asp	Lys	Pro	His	He	Arg	Pro	Val	Leu	Asn	Arg	Thr	Thr	Thr	Arg
		355					360					365			
Pro	Thr	Arg	Pro	Lys	Pro	Ser	Gly	Met	Pro	Ser	Gly	Asn	Gly	Val	Gly
	370					375					380				
Thr	Gly	Val	Lys	Gln	Ala	Pro	Arg	Pro	Ser	Gly	Ala	Asp	Arg	Asn	Val
385					390					395					400
Ser	Val	Asp	Ser		His	Pro	Thr	Lys		Pro	Gly	Thr	Arg	Arg	Pro
				405					410					415	
Pro	Leu	Pro		Arg	Pro	Thr	His		Arg	Arg	Lys	Pro		Pro	Pro
			420					425					430		
Asn	Asn		Thr	Gly	Lys	Pro		Ser	Ala	Gly	He		Ser	Ser	Gly
_	~ ~	435					440			_		445	mı		
Pro		Thr	Thr	Pro	Pro		_		Thr	Pro			Thr	Gly	Thr
Б	450	C.1		7.1	61					C1	460		V 3	D	. 1
	Leu	Glu	Arg	116	Glu	lhr	Asp	11e	Lys		Pro	ihr	vai	Pro	
465	C1	C1	C1	1	470	۸	т1.	ть	۸	475	C	C	C	D	480
ser	GIY	GIU	GIU	485	Glu	ASN	11e	ınr		rne	Ser	Ser	ser	495	ınr
Ana	C1	Tha	Aan		Lou	Clu	Luc	Davo	490	Dho	Luc	C1v	Dro		Vo.1
АГВ	GTU	1111		110	Leu	бту	LyS		Arg	rne	LyS	GIY		птѕ	vaii
Ara	Tur	11.	500	Lvc	Dro	Acr	Acr	505	Dro	Cvc	Sor	110	510	Acr	Sor
vi g	1 y 1	515	0111	Lys	Pro	nsp	520	361	110	Cys	OG1	525	1 111	ush	261
Val	lve		Phe	Pro	Lvs	Glu		Ala	Thr	նես	Glv		Ala	Thr	Ser
7 C.I.J.	- 10	1115	1 110	110	1 1	v_1u	V14								

	530					535					540				
Pro	Pro	Gln	Asn	Pro	Pro	Thr	Asn	Leu	Thr	Val	Val	Thr	Val	Glu	Gly
545					550					555					560
Cys	Pro	Ser	Phe	Val	He	Leu	Asp	Trp	Glu	Lys	Pro	Leu	Asn	Asp	Thr
				565					570					575	
Val	Thr	Glu	Tyr	Glu	Val	Ile	Ser	Arg	Glu	Asn	Gly	Ser	Phe	Ser	G1 y
			580					585					590		
Lys	Asn	Lys	Ser	Ile	Gln	Met	Thr	Asn	Gln	Thr	Phe	Ser	Thr	Val	Glu
		595					600					605			
Asn	Leu	Lys	Pro	Asn	Thr	Ser	Tyr	Glu	Phe	Gln	Val	Lys	Pro	Lys	Asn
	610					615					620				
Pro	Leu	Gly	Glu	Gly	Pro	Val	Ser	Asn	Thr	Val	Ala	Phe	Ser	Thr	Glu
625					630					635					640
Ser	Ala	Asp	Pro	Arg	Val	Ser	Glu	Pro	Val	Ser	Ala	Gly	Arg	Asp	Ala
				645					650					655	
lle	Trp	Thr	Glu	Arg	Pro	Phe	Asn	Ser	Asp	Ser	Tyr	Ser	Glu	Cys	Lys
			660					665					670		
Gly	Lys	Gln	Tyr	Val	Lys	Arg	Thr	Trp	Tyr	Lys	Lys	Phe	Val	Gly	Val
		675					680					685			
Gln	Leu	Cys	Asn	Ser	Leu	Arg	Tyr	Lys	He	Tyr	Leu	Ser	Asp	Ser	Leu
	690					695					700				
Thr	Gly	Lys	Phe	Tyr	Asn	lle	Gly	Asp	Gln	Arg	Gly	His	Gly	Glu	Asp
705					710					715					720
His	Cys	Gln	Phe	Val	Asp	Ser	Phe	Leu	Asp	Gly	Arg	Thr	Gly	Gln	Gln
				725					730					735	
Leu	Thr	Ser	Asp	Gln	Leu	Pro	lle	Lys	Glu	Gly	Tyr	Phe	Arg	Ala	Val
			740					745					750		
Arg	Gln	Glu	Pro	Val	Gln	Phe	Gly	Glu	He	Gly	Gly	His	Thr	Gln	11e
		755					760					765			
Asn	Tyr	Val	Gln	Trp	Tyr	Glu	Cys	G1 y	Thr	Thr	11e	Pro	Gly	Lys	Trp
	770					775					780				

<210> 3086 <211> 391 <212> PRT <213> Homo sapiens <400> 3086 Met Ala Gly Val Gly Ala Gly Pro Leu Arg Ala Met Gly Arg Gln Ala Leu Leu Leu Leu Ala Leu Cys Ala Thr Gly Ala Gln Gly Leu Tyr Phe His Ile Gly Glu Thr Glu Lys Arg Cys Phe Ile Glu Glu Ile Pro Asp Glu Thr Met Met Trp Asp Lys Gln Lys Glu Val Phe Leu Pro Ser Thr Pro Gly Leu Gly Met His Val Glu Val Lys Asp Pro Asp Gly Lys Val Val Leu Ser Arg Gln Tyr Gly Ser Glu Gly Arg Phe Thr Phe Thr Ser His Thr Pro Gly Asp His Gln Ile Cys Leu His Ser Asn Ser Thr Arg Met Ala Leu Phe Ala Gly Gly Lys Leu Arg Val His Leu Asp Ile Gln Val Gly Glu His Ala Asn Asn Tyr Pro Glu Ile Ala Ala Lys Asp Lys Leu Thr Glu Leu Gln Leu Arg Ala Arg Gln Leu Leu Asp Gln Val Glu Gln Ile Gln Lys Glu Gln Asp Tyr Gln Arg Lys Lys Val His Cys Leu Asn Met Asp Ser Leu Ser Phe Gln Leu Gly Leu Tyr Leu Ser Pro His Phe Leu Gln Ala Ser Asn Thr Ile Glu Pro Gly Gln Gln Ser Phe Val

Gln Val Arg Val Ser Pro Ser Val Ser Glu Phe Leu Leu Gln Leu Asp 210 215 220

Ser Cys His Leu Asp Leu Gly Pro Glu Gly Gly Thr Val Glu Leu Ile 225 230 235 240

Gln Gly Arg Ala Ala Lys Gly Asn Cys Val Ser Leu Leu Ser Pro Ser 245 250 255

Pro Glu Gly Asp Pro Arg Phe Ser Phe Leu Leu His Phe Tyr Thr Val Pro Ile Pro Lys Thr Gly Thr Leu Ser Cys Thr Val Ala Leu Arg Pro 275 280 285 Lys Thr Gly Ser Gln Asp Gln Glu Val His Arg Thr Val Phe Met Arg 295 300 Leu Asn Ile Ile Ser Pro Asp Leu Ser Gly Cys Thr Ser Lys Gly Leu 310 315 320 Val Leu Pro Ala Val Leu Gly Ile Thr Phe Gly Ala Phe Leu Ile Gly 325 330 335 Ala Leu Leu Thr Ala Ala Leu Trp Tyr 11e Tyr Ser His Thr Arg Ser 340 345 Pro Ser Lys Arg Glu Pro Val Val Ala Val Ala Ala Pro Ala Ser Ser 355 360 365 Glu Ser Ser Ser Thr Asn His Ser Ile Gly Ser Thr Gln Ser Thr Pro 375 380 Cys Ser Thr Ser Ser Met Ala 385 390

<210> 3087

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3087

Met Arg Lys Arg Glu Asn Leu Gly Asn Gly Ser Thr Glu Arg 11e 11e

1 5 10 15

Arg Val Leu Ala Arg His Met Asn Ala Gln Arg Thr Leu Glu Lys Pro 20 25 30

Glu Arg Val Pro Gly Gln His Pro Ala Pro Val Ser His Cys Pro Thr 35 40 45

Pro Gly Pro Pro Ser Pro Ala Pro Arg Gly His Arg Gly Phe Leu Ala 50 55 60

Leu Leu Ile Ile Ser Ile Phe Met Met Arg Leu Val Asn Lys Thr Arg
65 70 75 80

Glu Leu Ala Lys His Leu Tyr Leu Ser Arg Ala Arg Ser Ala Glu Gln 85 90 95 Arg Ser Val Gly Gly Leu Gly Gly Ala Asn 100 105

<210> 3088

<211> 285

<212> PRT

<213> Homo sapiens

<400> 3088

Met Leu Glu IIe Lys Met Glu Glu Ala Met Thr Tyr Thr Glu Asp Ser 1 5 10 15

Tyr Gly Met Asp Gly Lys Val Asn Gln Pro Arg Leu Thr Ala Asp Ile 20 25 30

Asn Trp Gln Gly Leu Glu Glu Leu His Ser Val Asn Glu Asn Ile Tyr 35 40 45

Glu Tyr Arg Gln Asn Tyr Arg Leu Ser Leu Val Asp Trp Thr Asn Tyr 50 55 60

Leu Lys Asp Leu Asp Arg Val Phe Ala Leu Leu Lys Ser His Tyr Glu
65 70 75 80

Gln Asn Lys Thr Asn Lys Thr Gln Thr Ala Gln Ser Asp Gly Phe Leu

85 90 95

Val Val Ser Ala Glu His Ala Val Ser Met Glu Met Ala Ser Ala Asp 100 105 110

Ser Asp Glu Asp Pro Arg His Lys Val Gly Lys Thr Pro His Leu Thr 115 120 125

Leu Pro Ala Asp Leu Gln Thr Leu His Leu Asn Arg Pro Thr Leu Ser 130 135 140

Pro Glu Ser Lys Leu Glu Trp Asn Asn Asp Ile Pro Glu Val Asn His

Leu Asn Ser Glu His Trp Arg Lys Thr Glu Lys Trp Thr Gly His Glu
165 170 175

Glu Thr Asn His Leu Glu Thr Asp Phe Ser Gly Asp Gly Met Thr Glu 180 185 190

Leu Glu Leu Gly Pro Ser Pro Arg Leu Gln Pro Ile His Arg His Pro 200 Lys Glu Leu Pro Gln Tyr Gly Gly Pro Gly Lys Asp Ile Phe Glu Asp 210 215 220 Gln Leu Tyr Leu Pro Val His Ser Asp Gly Ile Ser Val His Gln Met 230 235 Phe Thr Met Ala Thr Ala Glu His Arg Ser Asn Ser Ser Ile Ala Gly 250 245 Lys Met Leu Thr Lys Val Glu Lys Asn His Glu Lys Glu Lys Ser Gln 260 265 270 His Leu Glu Gly Ser Thr Ser Ser Ser Leu Ser Ser Asp 280 285 275

<210> 3089

<211> 697

<212> PRT

<213> Homo sapiens

<400> 3089

Met Ser Glu Gly Pro Ser Ser Pro Trp Thr Gln Leu Ala Gln Pro Leu

1 5 10 15

Gly Pro Pro Cys Gln Asp Thr Gly Pro Thr His Tyr Pro Pro Pro His 20 25 30

His Pro Pro Pro His Pro Pro Gln Ala Leu Pro Cys Pro Pro Ala Cys
35 40 45

Arg His Pro Glu Lys Gln Gly Ser Tyr Ser Pro Ala Leu Pro Leu Gln 50 55 60

Pro Leu Gly Gly His Lys Gly Thr Gly Tyr Gln Ala Gly Gly Leu Gly 65 70 75 80

Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr Ile Pro Pro

85 90 95

Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala Pro
100 105 110

Ser Pro Glv Leu Lys Leu Glu Pro Pro Leu Thr Pro Arg Cys Pro Leu

		115					120					125			
Asp	Phe	Ala	Pro	Gln	Thr	Leu	Ser	Phe	Pro	Tyr	Ala	Arg	Asp	Asp	Leu
	130					135					140				
Ser	Leu	Tyr	Gly	Ala	Ser	Pro	Gly	Leu	Gly	Gly	Thr	Pro	Pro	Ser	G1n
145					150					155					160
Asn	Asn	Val	Arg	Ala	Val	Pro	Gln	Pro	Gly	Ala	Phe	G1n	Arg	Ala	Cys
				165					170					175	
Gln	Pro	Leu	Pro	Ala	Ser	Gln	Pro	Cys	Ser	Glu	Pro	Val	Arg	Pro	Ala
			180					185					190		
Gln	Glu	Ala	Glu	Glu	Lys	Thr	Trp	Leu	Pro	Ser	Cys	Arg	Lys	Glu	Lys
		195					200					205			
Leu	Gln	Pro	Arg	Leu	Ser	Glu	His	Ser	Gly	Pro	Pro	He	Val	He	Arg
	210					215					220				
Asp	Ser	Pro	Val	Pro	Cys	Thr	Pro	Pro	Ala	Leu	Pro	Pro	Cys	Ala	Arg
225					230					235					240
Glu	Cys	Gln	Ser	Leu	Pro	Gln	Lys	Glu	Asp	Ala	Arg	Pro	Pro	Ser	Ser
				245					250					255	
Pro	Pro	Met	Pro	Val	lle	Asp	Asn	Val	Phe	Ser	Leu	Ala	Pro	Tyr	Arg
			260					265					270		
Asp	Tyr	Leu	Asp	Val	Pro	Ala	Pro	Glu	Ala	Thr	Thr	Glu	Pro	Asp	Ser
		275					280					285			
Ala	Thr	Ala	Glu	Pro	Asp	Ser	Ala	Pro	Ala	Thr	Ser	Glu	Gly	Gln	Asp
	290					295					300				
Lys	Gly	Cys	Arg	Gly	Thr	Leu	Pro	Ala	Gln	Glu	Gly	Pro	Ser	Gly	Ser
305					310					315					320
Lys	Pro	Leu	Arg	Gly	Ser	Leu	Lys	Glu	Glu	Val	Ala	Leu	Asp	Leu	Ser
				325					330					335	
Val	Arg	Lys	Pro	Thr	Ala	Glu	Ala	Ser	Pro	Val	Lys	Ala	Ser	Arg	Ser
			340					345	•				350		
Val	Glu	His	Ala	Lys	Pro	Thr	Ala	Ala	Met	Asp	Val	Pro	Asp	Val	Gly
		355					360					365			
Asn	Met	Val	Ser	Asp	Leu	Pro	Gly	Leu	Lys	Lys	He	Asp	Thr	Glu	Ala
	370					375					380				
Pro	Gly	Leu	Pro	Gly	Val	Pro	Val	Thr	Thr	Asp	Ala	Met	Pro	Arg	Thr
385					390					395					400
Asn	Phe	His	Ser	Ser	Val	Ala	Phe	Met	Phe	Arg	lvs	Phe	Ive	He	Len

			405					410					415	
Pro	Ala	Pro	Leu	Pro	Ala	Ala	Val	Val	Pro	Ser	Thr	Pro	Thr	Ser
		420					425					430		
Pro	Ala	Pro	Thr	Gln	Pro	Ala	Pro	Thr	Pro	Thr	Ser	Gly	Pro	Ile
	435					440					445			
Leu	Arg	lle	Leu	Ala	Gln	Gln	Pro	Leu	Ser	Val	Thr	Cys	Phe	Ser
450					455					460				
Ala	Leu	Pro	Ser	Pro	Pro	Ala	Val	Ala	Val	Ala	Ser	Pro	Ala	Pro
				470					475					480
Pro	Ala	Pro	Ser	Pro	Ala	Pro	Ala	Arg	Ala	Gln	Ala	Pro	Ala	Ser
			485					490					495	
Arg	Asp	Pro	Ala	Pro	Ala	Pro	Ala	Pro	Val	Ala	Gly	Pro	Ala	Pro
		500					505					510		
Ser	Thr	Ser	Ala	Pro	Gly	Asp	Ser	Leu	Glu	Gln	His	Phe	Thr	Gly
	515					520					525			
His	Ala	Ser	Leu	Cys	Asp	Ala	He	Ser	G1 y	Ser	Val	Ala	His	Ser
530					535					540				
Pro	Glu	Lys	Leu	Arg	Glu	Trp	Leu	Glu	Thr	Ala	Gly	Pro	Trp	G1 y
				550					555					560
Ala	Ala	Trp		Asp	Cys	Gln	G1 y	Val	Gln	Gly	Leu	Leu	Ala	Lys
								570					575	
Leu	Ser		Leu	Gln	Arg	Phe		Arg	Thr	His	Arg		Pro	Phe
His		Val	Arg	Ala	Gly		He	Phe	Val	Pro		His	Leu	Val
0.3			151							_				
		Leu	Phe	Pro			Pro	Pro	Ala			Asp	His	Val
•				17 3				D	TI			C	C1	61
GIn	GIU	HIS	Arg		61 u	Leu	Arg	rro		Inr	Leu	Ser	GIU	
				n.30					ครอ					640
A 1 =	1	Λ	C1		A 1 -	1	D	C1		ть	C	A	M - 4	1
Ala	Leu	Arg			Ala	Leu	Pro			Thr	Ser	Arg		Leu
			645	Leu				650	Cys				655	
	Leu Leu	Ala	645	Leu			Pro	650	Cys			Asp	655	
Leu	Leu	Ala 660	645 Leu	Leu Arg	Gln	Leu	Pro 665	650 Asp	Cys lle	Tyr	Pro	Asp 670	655 Leu	Leu
Leu		Ala 660	645 Leu	Leu Arg	Gln	Leu	Pro 665	650 Asp	Cys lle	Tyr	Pro	Asp 670	655 Leu	Leu
	Pro Leu 450 Ala Pro Arg Ser His 530 Pro Ala Leu His Glu 610	Pro Ala 435 Leu Arg 450 Ala Leu Pro Ala Arg Asp Ser Thr 515 His Ala 530 Pro Glu Ala Ala Leu Ser His Val 595 Glu Arg 610	420 Pro A1a Pro 435 11e 450 Fro A1a Pro Pro A1a Pro Ser Thr Ser 515 Ser His A1a Ser 530 Trp A1a Trp Leu Ser G1n 580 His Val Val 595 C1u Arg Leu 610 War Leu 610 Create Create Create	Pro Ala Pro Leu 420 Thr 420 Thr 435 Tr Thr 435 Tr Leu 450 Pro Ser Ala Leu Ser Arg Asp Pro Ala 500 Fro Ala 515 Tr Leu 530 Tr Leu Ala Ala Ser Leu Ala Ala Trp Gln 565 Leu 580 Leu His Val Val Arg Glu Arg Leu Phe Glu Arg Leu Phe Glu Arg Leu Phe Glu Arg Leu Phe	Pro Ala Pro Leu Pro Pro Ala Pro Thr Gln Ala Pro Thr Ala Ala Leu Pro Ala Ala Pro Ser Pro Arg Ala Pro Ala Pro Arg Asp Pro Ala Pro Ser Thr Ser Ala Pro Bro Ala Pro Ala Pro Arg Ala Pro Ala Pro Bro Ala Pro Ala Pro Bro Ala Pro Ala Pro Ala Ala Ser Leu Arg Ala Ala Trp Gln Asp Ala Ala Trp Gln Asp Ala Ala Trp Gln Asp Bro Bro Bro Bro Bro Ala Ala Arg Ala Arg Ala A	Pro Ala Pro Leu Pro Ala Pro Ala Pro Thr Gln Pro Pro Ala Pro Thr Gln Afo Ala Pro Leu Ala Gln Ala Pro Ser Pro Ala Arg Asp Pro Ala Pro Ala Bro Ala Pro Ala Pro Ala Bro Ala Pro Ala Pro Ala Bro Ala Pro Ala Ala Ala Bro Ala Pro Ala Ala Ala Bro Ala Ala Ala Ala Ala Bro Bro Ala Ala Ala Ala Bro Bro Bro A	Pro Ala Pro Leu Pro Ala Ala Pro Ala Pro Thr Gln Pro Ala Pro Ala Pro Thr Gln Pro Ala Ala Arg Ile Leu Ala Gln Gln Ala Leu Pro Ala Pro Ala Arg Ala Pro Ser Pro Ala Pro Arg Asp Pro Ala Pro Ala Pro Arg Asp Pro Ala Pro Ala Pro Arg Asp Pro Ala Pro Ala Pro Arg Ala Pro Ala Pro Ala Ala Bro Ala Pro Ala Pro Ala Ala Bro Ala Pro Ala Pro Ala Ala Bro Ala A	Pro Ala Pro Ala Ala Val 420	Promotion Ala A	Pro Ala Pro Leu Pro Ala Val Val Pro Pro Ala Pro Thr Gln Pro Ala Pro Thr Pro Ala Pro Ine Ala Pro Ala Pro Leu Ala Pro Ala Pro Leu Ala Pro Ala Val Ala A	Pro Ala Pro Leu Pro Ala Val Val Pro Pro Ala Pro Ala Pro Thr Gln Pro Ala Pro Thr Pro Ala Pro Gln Pro Leu Ser Val Ala Ala Pro Gln Pro Leu Ser Val Ala	Pro Leu Pro Ala Ala Val Val Pro Ser Thr Pro Ala Pro Ala Pro Ala Pro Thr Thr Gln Ala Pro Thr Thr Ad5 Leu Arg 11e Leu Ala Bro Ala Pro Leu Ser Ad5 Ala Leu Pro Ala Pro Leu Ala Pro Ala Leu Pro Pro Ala Val Ala A	Pro Ala Pro Ala Ala Ala Val Pro Ser Thr Pro Pro Ala Pro Tro Gln Pro Ala Pro Tro Pro Ala Pro Ala Ala Pro Ala A	Pro Ala Pro Ala Ala Val Val Pro Pro Ala Pro Pro Ala Pro Pro Ala Pro Pro Ala Ala Pro Ala Pro Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala

<210> 3090 <211> 412 <212> PRT -<213> Homo sapiens <400> 3090 Met Cys Lys Thr Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val Val Glu Leu Val Lys Lys Tyr Arg Asn Ala Val Thr Leu Ala lle Gly Asp Gly Ala Asn Asp Val Ser Met lle Lys Ser Ala His Ile Gly Val Gly Ile Ser Gly Gln Glu Gly Leu Gln Ala Val Leu Ala Ser Asp Tyr Ser Phe Ala Gln Phe Arg Tyr Leu Gln Arg Leu Leu Val His Gly Arg Trp Ser Tyr Phe Arg 11e Cys Lys Phe Leu Cys Tyr Phe Phe Tyr Lys Asn Phe Ala Phe Thr Leu Val His Phe Trp Phe Gly Phe Phe Cys Gly Phe Ser Ala Gln Thr Val Tyr Asp His Trp Phe Ile Thr Leu Phe Asn lle Val Tyr Thr Ser Leu Pro Val Leu Ala Met Gly lle Phe Asp Gln Asp Val Ser Asp Gln Asn Ser Val Asp Cys Pro Gln Leu Tyr Lys Pro Gly Gln Leu Asn Leu Leu Phe Asn Lys Arg Lys Phe Phe lle Cys Val Leu His Gly lle Tyr Thr Ser Leu Val Leu Phe Phe lle Pro Tyr Gly Ala Phe Tyr Asn Val Ala Gly Glu Asp Gly Gln His 11e

Ala Asp Tyr Gln Ser Phe Ala Val Thr Met Ala Thr Ser Leu Val Ile

	210					215					220				
Val	Val	Ser	Val	Gln	He	Ala	Leu	Asp	Thr	Ser	Tyr	Trp	Thr	Phe	He
225					230					235					240
Asn	His	Val	Phe	11e	Trp	Gly	Ser	Пe	Ala	He	Tyr	Phe	Ser	He	Leu
				245					250					255	
Phe	Thr	Met	His	Ser	Asn	Gly	Пe	Phe	Gly	He	Phe	Pro	Asn	Gln	Phe
			260					265					270		
Pro	Phe	Val	Gly	Asn	Ala	Arg	His	Ser	Leu	Thr	Gln	Lys	Cys	Пe	Trp
		275					280					285			
Leu	Val	He	Leu	Leu	Thr	Thr	Val	Ala	Ser	Val	Met	Pro	Val	Val	Ala
	290					295					300				
Phe	Arg	Phe	Leu	Lys	Val	Asp	Leu	Tyr	Pro	Thr	Leu	Ser	Asp	Gln	Ile
305					310					315					320
Arg	Arg	Trp	Gln	Lys	Ala	Gln	Lys	Lys	Ala	Arg	Pro	Pro	Ser	Ser	Arg
				325					330					335	
Arg	Pro	Arg	Thr	Arg	Arg	Ser	Ser	Ser	Arg	Arg	Ser	Gly	Tyr	Ala	Phe
			340					345					350		
Ala	His	Gln	Glu	Gly	Tyr	Gly	Glu	Leu	Ile	Thr	Ser	Gly	Lys	Asn	Met
		355					360					365			
Arg	Ala	Lys	Asn	Pro	Pro	Pro	Thr	Ser	Gly	Leu	Glu	Lys	Thr	His	Tyr
	370					375					380				
Asn	Ser	Thr	Ser	Trp	He	Glu	Asn	Leu	Cys	Lys	Lys	Thr	Thr	Asp	Thr
385					390					395					400
Val	Ser	Ser	Phe	Ser	Gln	Asp	Lys	Thr	Val	Lys	Leu				
				405					410						

<211> 655

<212> PRT

<213> Homo sapiens

<400> 3091

Met Thr Glu Ser Leu Pro Val Ser Asp Val Leu Glu Ser Val Thr Leu

1 5 10 15

Ser Thr Glu Ser Pro Lys Glu Thr 11e Ala Pro Ala Lys Thr Asp Tyr

			20					25					30		
Val	Tyr	Pro	Thr	Ala	Lys	Ala	Pro	Leu	Trp	Pro	Glu	Glu	Pro	Lys	Thr
		35					40					45			
Glu	Val	Val	Glu	Ser	He	Thr	Tyr	Val	Ser	Glu	Pro	Pro	Glu	Thr	Thr
	50					55					60				
Leu	Glu	Thr	Ser	Pro	Leu	Pro	Ser	Gln	Ser	He	Thr	Leu	Pro	Ser	Pro
65					70					75					80
Asp	Glu	Pro	Gln	Thr	Glu	Pro	Ala	Pro	Lys	Gln	Thr	Pro	Arg	Ala	Pro
				85					90					95	
Pro	Lys	Pro	Lys	Thr	Ser	Pro	Arg	Pro	Arg	Ile	Pro	Gln	Thr	Gln	Pro
			100					105					110		
Val	Pro	Lys	Val	Pro	Gln	Arg	Val	Thr	Ala	Lys	Pro	Lys	Thr	Ser	Pro
		115					120					125			
Ser	Pro	Glu	Val	Ser	Tyr	Thr	Thr	Pro	Ala	Pro	Lys	Asp	Val	Leu	Leu
	130					135					140				
Pro	His	Lys	Pro	Tyr	Pro	Glu	Val	Ser	Gln	Ser	Glu	Pro	Ala	Pro	Leu
145					150					155					160
Glu	Thr	Arg	Gly	He	Pro	Phe	He	Pro	Met	lle	Ser	Pro	Ser	Pro	Ser
				165					170					175	
Gln	Glu	Glu	Leu	Gln	Thr	Thr	Leu	Glu	Glu	Thr	Asp	Gln	Ser	Thr	Gln
			180					185					190		
Glu	Pro	Phe	Thr	Thr	Lys	He	Pro	Arg	Thr	Thr	Glu	Leu	Ala	Lys	Thr
		195					200					205			
Thr		Ala	Pro	His	Arg		Tyr	Thr	Thr	Val		Pro	Arg	Thr	Ser
	210					215					220	m	m,		
	Lys	Pro	His	He			Val	Leu	Asn			Ihr	Ihr	Arg	
225	Α.	n.	1.	D.	230		M 4	D.	C	235		C1.	W - 3	C1.	240
ınr	Arg	Pro	Lys		ser	ыу	меι	Pro		ыу	Asn	61 y	val		ınr
C1	Vol	Lve	C1	245	Dro	Λ 30.00	Duc	San	250	A 1 a	Acr	A 22.00	Acr	255 Val	Son
O.I.Y	vaı	Lys	260	ита	r r 0	лгg	110	Ser	61 y	ита	asp	мгg	270	vai	ser
Val	Acr	Son		Ніс	Dro	The	Lvc	265	Dro	Glv	The	Arc		Pro	Pro
val	nsp	5er 275	1111	111.5	110	1111	280	Lys	110	ory	1111	71 g 285	итв	110	110
Lou	Pro		Δνα	Pro	Thr	Hic		Ara	Ara	lve	Pro		Pro	Pro	Aen
Leu	290	110	мв	110	1111	295	110	Arg	ив	гìэ	300	Leu	110	110	noll
Asn		Thr	Glv	Lvs	Pro		Ser	Ala	Glv	He		Ser	Ser	Glv	Pro

305					310					315					320
He	Thr	Thr	Pro	Pro	Leu	Arg	Ser	Thr	Pro	Arg	Pro	Thr	Gly	Thr	Pro
				325					330					335	
Leu	Glu	Arg	11e	Glu	Thr	Asp	He	Lys	Gln	Pro	Thr	Val	Pro	Ala	Ser
			340					345					350		
Gly	Glu	Glu	Leu	Glu	Asn	He	Thr	Asp	Phe	Ser	Ser	Ser	Pro	Thr	Arg
		355					360					365			
Glu	Thr	Asp	Pro	Leu	Gly	Lys	Pro	Arg	Phe	Lys	Gly	Pro	His	Val	Arg
	370					375					380				
Tyr	Ile	Gln	Lys	Pro	Asp	Asn	Ser	Pro	Cys	Ser	He	Thr	Asp	Ser	Val
385					390					395					400
Lys	Arg	Phe	Pro	Lys	Glu	Glu	Ala	Thr	Glu	Gly	Asn	Ala	Thr	Ser	Pro
				405					410					415	
Pro	Gln	Asn	Pro	Pro	Thr	Asn	Leu	Thr	Val	Val	Thr	Val	Glu	Gly	Cys
			420					425					430		
Pro	Ser	Phe	Val	He	Leu	Asp	Trp	Glu	Lys	Pro	Leu	Asn	Asp	Thr	Va]
		435					440					445			
Thr	Glu	Tyr	Glu	Val	Ile	Ser	Arg	Glu	Asn	Gly	Ser	Phe	Ser	Gly	Lys
	450					455					460				
Asn	Lys	Ser	He	Gln	Met	Thr	Asn	Gln	Thr	Phe	Ser	Thr	Val	Glu	Asn
465					470					475					480
Leu	Lys	Pro	Asn	Thr	Ser	Tyr	Glu	Phe	Gln	Va1	Lys	Pro	Lys	Asn	Pro
				485					490					495	
Leu	Gly	Glu	Gly	Pro	Val	Ser	Asn	Thr	Val	Ala	Phe	Ser	Thr	Glu	Ser
			500					505					510		
Ala	Asp	Pro	Arg	Val	Ser	Glu	Pro	Val	Ser	Ala	Gly	Arg	Asp	Ala	11e
		515					520					525			
Trp	Thr	Glu	Arg	Pro	Phe	Asn	Ser	Asp	Ser	Tyr	Ser	Glu	Cys	Lys	Gly
	530					535					540				
Lys	Gln	Tyr	Val	Lys	Arg	Thr	Trp	Tyr	Lys	Lys	Phe	Val	Gly	Val	G1n
545					550					555					560
Leu	Cys	Asn	Ser	Leu	Arg	Tyr	Lys	He	Tyr	Leu	Ser	Asp	Ser	Leu	Thr
				565					570					575	
Gly	Lys	Phe	Tyr	Asn	He	Gly	Asp	Gln	Arg	Gly	His	Gly	Glu	Asp	His
			580					585					590		

Cys Gln Phe Val Asp Ser Phe Leu Asp Gly Arg Thr Gly Gln Gln Leu Thr Ser Asp Gln Leu Pro Ile Lys Glu Gly Tyr Phe Arg Ala Val Arg Gln Glu Pro Val Gln Phe Gly Glu Ile Gly Gly His Thr Gln Ile Asn Tyr Val Gln Trp Tyr Glu Cys Gly Thr Thr lle Pro Gly Lys Trp

<210> 3092

<211> 412

<212> PRT

<213> Homo sapiens

⟨400⟩ 3092

Met Asp Ala Arg Trp Trp Ala Val Val Leu Ala Ala Phe Pro Ser Leu Gly Ala Gly Gly Glu Thr Pro Glu Ala Pro Pro Glu Ser Trp Thr Gln Leu Trp Phe Phe Arg Phe Val Val Asn Ala Ala Gly Tyr Ala Ser Phe Met Val Pro Gly Tyr Leu Leu Val Lys Ala Cys Val Phe Gly Asn Glu Pro Lys Ala Ser Asp Glu Val Pro Leu Ala Pro Arg Thr Glu Ala Ala Glu Thr Thr Pro Met Trp Gln Ala Leu Lys Leu Leu Phe Cys Ala Thr Gly Leu Gln Val Ser Tyr Leu Thr Trp Gly Val Leu Gln Glu Arg Val Met Thr Arg Ser Tyr Gly Ala Thr Ala Thr Ser Pro Gly Glu Arg Phe Thr Asp Ser Gln Phe Leu Val Leu Met Asn Arg Val Leu Ala Leu

Ile Val Ala Gly Leu Ser Cys Val Leu Cys Lys Gln Pro Arg His Gly

Ala	Pro	Met	Tyr	Arg	Tyr	Ser	Phe	Ala	Ser	Leu	Ser	Asn	Val	Leu	Ser
				165					170					175	
Ser	Trp	Cys	Gln	Tyr	Glu	Ala	Leu	Lys	Phe	Val	Ser	Phe	Pro	Thr	Gln
			180					185					190		
Val	Leu	Ala	Lys	Ala	Ser	Lys	Val	He	Pro	Val	Met	Leu	Met	Gly	Lys
		195					200					205			
Leu	Val	Ser	Arg	Arg	Ser	Tyr	Glu	His	Trp	Glu	Tyr	Leu	Thr	Ala	Thr
	210					215					220				
Leu	Ile	Ser	Ile	Gly	Val	Ser	Met	Phe	Leu	Leu	Ser	Ser	Gly	Pro	Glu
225					230					235					240
Pro	Arg	Ser	Ser	Pro	Ala	Thr	Thr	Leu	Ser	Gly	Leu	Πle	Leu	Leu	Ala
				245					250					255	
Gly	Tyr	lle	Ala	Phe	Asp	Ser	Phe	Thr	Ser	Asn	Trp	Gln	Asp	Ala	Leu
			260					265					270		
Phe	Ala	Tyr	Lys	Met	Ser	Ser	Val	G1n	Met	Met	Phe	Gly	Val	Asn	Phe
		275					280					285			
Phe	Ser	Cys	Leu	Phe	Thr	Val	Gly	Ser	Leu	Leu	Glu	Gln	Gly	Ala	Leu
	290					295					300				
Leu	Glu	Gly	Thr	Arg	Phe	Met	Gly	Arg	His	Ser	Glu	Phe	Ala	Ala	His
305					310					315					320
Ala	Leu	Leu	Leu	Ser	Ile	Cys	Ser	Ala	Cys	Gly	Gln	Leu	Phe	Ile	Phe
				325					330					335	
Tyr	Thr	lle	Gly	Gln	Phe	Gly	Ala	Ala	Va]	Phe	Thr	He	He	Met	Thr
			340					345					350		
Leu	Arg	Gln	Ala	Phe	Ala	He	Leu	Leu	Ser	Cys	Leu	Leu	Tyr	Gly	His
		355					360					365			
Thr	Val	Thr	Val	Val	Gly	Gly	Leu	Gly	Val	Ala	Va]	Val	Phe	Ala	Ala
	370					375					380				
Leu	Leu	Leu	Arg	Val	Tyr	Ala	Arg	Gly	Arg	Leu	Lys	Gln	Arg	Gly	Lys
385					390				•	395					400
Lys	Ala	Val	Pro	Val	Glu	Ser	Pro	Val	Gln	Lys	Val				
				405					410						

<211> 474

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<212> PRT
<213> Homo sapiens
<400> 3093
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Leu Ser Ile Arg Lys Phe Ile Leu Val Lys Asn Pro Val Asn Val Arg
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                                 25
Asn Val Gly Lys Phe Leu Val lle Ala Ile Asn Leu Leu Cys Ile Arg
         35
                             40
                                                  45
Asp Phe Ile Leu Val Arg Asn Pro Met Asn Val Lys Asn Val Gly Arg
                         55
Pro Leu Leu Phe Thr His Asn Leu Ile Asp Ile Arg Lys Phe Thr Leu
65
                     70
                                          75
                                                              80
Val Lys Asn Pro Ile Cys Val Arg Asn Val Ile Arg Val Phe Phe Ser
                 85
                                      90
Arg Leu Glu Leu Thr Gln His Lys Arg Ile His Thr Gly Lys Lys Ser
                                105
                                                     110
Tyr Glu Cys Lys Glu Cys Gly Lys Val Phe Gln Leu Ile Phe Tyr Phe
        115
                            120
                                                 125
Lys Glu His Glu Arg Ile His Thr Gly Lys Lys Pro Tyr Glu Cys Lys
                        135
Glu Cys Gly Lys Ala Phe Ser Val Cys Gly Gln Leu Thr Arg His Gln
145
                    150
                                         155
                                                             160
Lys lle His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys
                165
                                     170
Thr Phe Arg Leu Ser Phe Tyr Leu Thr Glu His Arg Arg Thr His Ala
                                185
                                                     190
Gly Lys Lys Pro Tyr Glu Cys Lys Glu Cys Gly Glu Ser Phe Asn Val
        195
                            200
                                                 205
Arg Gly Gln Leu Asn Arg His Lys Thr lle His Thr Gly lle Lys Pro
                        215
                                             220
Phe Ala Cys Lys Val Cys Glu Lys Ala Phe Ser Tyr Ser Gly Asp Leu
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Arg Val His Ser Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys

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Glu Cys Gly Lys Ala Phe Met Leu Arg Ser Val Leu Thr Glu His Gln
                                265
Arg Leu His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys
        275
                            280
                                                 285
Thr Phe Arg Val Arg Ser Gln Ile Ser Leu His Lys Lys Ile His Thr
                        295
Asp Val Lys Pro Tyr Lys Cys Val Arg Cys Gly Lys Thr Phe Arg Phe
                    310
                                        315
Gly Phe Tyr Leu Thr Glu His Gln Arg Ile His Thr Gly Glu Lys Pro
                325
                                    330
                                                         335
Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Ile Arg Arg Gly Asn Leu
                                345
Lys Glu His Leu Lys Ile His Ser Gly Leu Lys Pro Tyr Asp Cys Lys
        355
                            360
                                                 365
Glu Cys Gly Lys Ser Phe Ser Arg Arg Gly Gln Phe Thr Glu His Gln
                        375
                                            380
Lys Ile His Thr Gly Val Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys
                    390
                                        395
Ala Phe Ser Arg Ser Val Asp Leu Arg Ile His Gln Arg Ile His Thr
                405
                                    410
Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ala Phe Arg Leu
                                425
Asn Ser His Leu Thr Glu His Gln Arg Ile His Thr Gly Glu Lys Pro
        435
                            440
                                                 445
Tyr Glu Cys Lys Val Cys Arg Lys Ala Phe Arg Gln Tyr Ser His Leu
                        455
                                            460
Tyr Gln His Gln Lys Thr His Asn Val Ile
465
                    470
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<211> 237

<212> PRT

<213> Homo sapiens

<400> 3094

Met	Glu	Pro	Gln	Asp	Phe	Ser	Phe	Pro	Gly	Tyr	Pro	Leu	Pro	Ala	Leu
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He	Pro	Ser	Pro	Pro	Pro	Pro	Pro	Leu	Gly	Thr	Ser	Pro	Pro	Leu	Thr
			20					25					30		
${\rm Pro}$	Arg	Ser	Pro	Ser	His	Ser	Gly	Glu	Pro	Phe	Gly	Leu	Pro	Gly	Leu
		35					40					45			
Glu	Pro	Glu	Pro	Gly	Gly	Pro	Gln	Ala	Gly	Glu	Pro	Pro	Pro	Pro	Leu
	50					55					60				
Ala	Gly	Asp	Lys	Pro	His	Lys	Cys	Pro	Glu	Cys	Gly	Lys	Gly	Phe	Arg
65					70					75					80
Arg	Ser	Ser	Asp	Leu	Va]	Lys	His	His	Arg	Val	His	Thr	Gly	Glu	Lys
				85					90					95	
Pro	Tyr	Leu	Cys	Pro	Glu	Cys	Gly	Lys	Gly	Phe	Ala	Asp	Ser	Ser	Ala
			100					105					110		
Arg	Val	Lys	His	Leu	Arg	Thr	His	Arg	Gly	Glu	Arg	Ala	Arg	Pro	Pro
		115					120					125			
Pro	Pro	Ser	Thr	Leu	Leu	Arg	Pro	His	Asn	Pro	Pro	Gly	Pro	Val	Pro
	130					135					140				
Met	Ala	Pro	Arg	Pro	Arg	Val	Arg	Ala	Gln	Pro	Ser	Gly	Pro	Ser	Gln
145					150					155					160
Pro	His	Val	Cys	Gly	Phe	Cys	Gly	Lys	Glu	Phe	Pro	Arg	Ser	Ser	Asp
				165					170					175	
Leu	Val	Lys	His	Arg	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys
			180					185					190		
Ala	Glu	Cys	Gly	Lys	Gly	Phe	Gly	Asp	Ser	Ser	Ala	Arg	11e	Lys	His
		195					200					205			
Gln	Arg	Gly	His	Leu	Val	Leu	Thr	Pro	Phe	Gly	Ile	Gly	Asp	Gly	Arg
	210					215					220				
Ala	Arg	Pro	Leu	Lys	Gln	Glu	Ala	Ala	Thr	Gly	Leu	Glu			
225					230					235					

<211> 258

<212> PRT

<213> Homo sapiens

<400)> 3(095													
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l				5					10					15	
Cys	Phe	Met	Lys	Asn	He	Ser	Arg	Tyr	Leu	Thr	Asp	lle	Lys	Pro	Leu
			20					25					30		
Pro	Pro	Asn	Ile	Lys	Asp	Arg	Leu	He	Lys	He	Met	Ser	Met	Gln	Gly
		35					40					45			
Gln	Ile	Thr	Asp	Ser	Asn	Ile	Ser	Glu	lle	Leu	His	Pro	Glu	Val	Glr
	50					55					60				
Thr	Leu	Asp	Leu	Arg	Ser	Cys	Asp	lle	Ser	Asp	Ala	Ala	Leu	Leu	His
65					70.					75					80
Leu	Ser	Asn	Cys	Arg	Lys	Leu	Lys	Lys	Leu	Asn	Leu	Asn	Ala	Ser	Lys
				85					90					95	
Gly	Asn	Arg	Val	Ser	Val	Thr	Ser	Glu	Gly	lle	Lys	Ala	Val	Ala	Ser
			100					105					110		
Ser	Cys	Ser	Tyr	Leu	His	Glu	Ala	Ser	Leu	Lys	Arg	Cys	Cys	Asn	Lei
		115					120					125			
Thr	Asp	Glu	Gly	Val	Val	Ala	Leu	Ala	Leu	Asn	Cys	Gln	Leu	Leu	Lys
	130					135					140				
He	lle	Asp	Leu	Gly	Gly	Cys	Leu	Ser	lle	Thr	Asp	Val	Ser	Leu	His
145					150					155					160
Ala	Leu	Gly	Lys	Asn	Cys	Pro	Phe	Leu	Gln	Cys	Val	Asp	Phe	Ser	Ala
				165					170					175	
Thr	Gln	Va]	Ser	Asp	Ser	Gly	Val	lle	Ala	Leu	Val	Ser	Gly	Pro	Cys
			180					185					190		
Ala	Lys	Lys	Leu	Glu	Glu	Ile	His	Met	Gly	His	Cys	Val	Asn	Leu	Thr
		195					200					205			
Asp	Gly	Ala	Val	Glu	Ala	Val	Leu	Thr	Tyr	Cys	Pro	Gln	Ile	Arg	116
	210					215					220				
Leu	Leu	Phe	His	G]y	Cys	Pro	Leu	He	Thr	Asp	His	Ser	Arg	Glu	Va]
225					230					235					240
Leu	Glu	Gln	Leu	Val	Gly	Pro	Asn	Lys	Leu	Lys	Gln	Val	Thr	Trp	Thi
				245					250					255	
Val	Tyr														

<210> 3096 <211> 130 <212> PRT <213> Homo sapiens <400> 3096 Met Ser Ser Thr Trp Val Thr Asn His Ser Glu Ile Leu Asn Thr Tyr 5 10 Pro Leu Gly Ala Gly Gly Gly Asn Asp Val Gln Tyr Leu Lys Gln Asn 25 Leu Thr Trp Thr Glu Arg Leu Tyr Phe Pro Leu Leu His Glu Ser Leu 35 40 45 lle Ile Leu Gly Gly Leu Leu Cys lle Pro Pro Phe Leu Leu Ser Pro 55 Pro Leu Pro Phe Val Phe Ser Lys Glu Ser Glu Leu Arg Phe Pro Cys 75 65 70 80 Ser Pro Ala Thr Leu Ile Ser Lys Thr Cys Leu Cys Val Arg Phe Phe 85 90 Thr Gly Asn Met Thr Phe Cys Phe Cys Ile Gly Phe Thr Val Ile Gln 105 Phe Ser Ser Leu Ile Ser Ser Lys Thr Lys Ser Glu Cys Thr Arg Phe 115 120 125

<210> 3097

Phe Arg

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3097

Met Gln Leu Lys Ala Leu Trp Ala Leu Ala Gly Ala Ala Leu Cys

5 10 Cys Phe Leu Val Leu Val Ile His Ala Gln Phe Leu Lys Glu Gly Gln 20 25 Leu Ala Ala Gly Thr Cys Glu Ile Val Thr Leu Asp Arg Asp Ser Ser 35 40 45 Gln Pro Arg Arg Thr Ile Ala Arg Gln Thr Ala Arg Cys Ala Cys Arg 55 60 Lys Gly Gln Ile Ala Gly Thr Thr Arg Ala Arg Pro Ala Cys Val Asp 65 70 75 80 Ala Arg Ile Ile Lys Thr Lys Gln Trp Cys Asp Met Leu Pro Cys Leu 90 Glu Gly Glu Gly Cys Asp Leu Leu Ile Asn Arg Ser Gly Trp Thr Cys 105 Thr Gln Pro Gly Gly Arg Ile Lys Thr Thr Val Ser 115 120 125

<210> 3098

<211> 258

<212> PRT

<213> Homo sapiens

<400> 3098

Met Gly His Thr Leu Ser Ser Lys Cys Gly Pro Ala Pro Arg Thr Pro

1 5 10 15

Pro Arg Gly Leu Ala Pro Val Pro Arg Leu Leu Gly Asn Pro Ser Thr
20 25 30

Leu Arg Val Gly Glu Val Thr Pro Lys Leu Leu Leu Ser Gly Asp Phe 35 40 45

Arg Thr Gln Arg Arg Pro Arg Ser Cys Gln Ala Phe Gln Gly Gln His
50 55 60

Pro Pro Pro Val Arg Ser Leu Ser Ser Gly Pro Pro Arg Ala Pro Arg 65 70 75 80

Leu Ser Pro Ala Gly Ala Ser Pro Gly Pro Gln Ser Ala Ser Ser Arg 85 90 95

Gly Gln Arg Ala Ser Ser Pro Ala Arg Ser Gly Arg Ala Ser Arg Pro

100 105 110 Thr Ser Pro Ala Glu Ser Thr Ala Pro Pro Arg Ser Pro Arg Thr Ser 120 Ser Arg Val Gly Ser Gly Ser Arg Val Gly Thr Arg Gly Pro Leu Ala 140 135 His Arg Tyr Pro His Arg Arg Pro Pro Pro Pro Pro Phe Val Ala 150 155 Lys His Ser Cys Ser Ser Phe Ser Cys Leu Pro Gln Lys Ala Ala Pro 170 175 165 Asn Leu Ala Arg Ser Trp Gly Leu Pro Gly Ser Arg Thr Ala Arg Leu 180 185 Ser Gln Gly Pro Asp Arg Gly Pro Arg Gly Val Cys Arg Leu Gly Ser 200 205 Gly Ala Ala Glu Pro Ser Gln Arg Arg Gly Lys Pro Ser Arg Gly Thr 210 215 His Arg Pro Glu Pro Arg Ala Gly Gly Arg Leu Ser Pro Ala Glu Arg 230 235 Ser Pro Glu Thr Glu His Ala Gln Cys Gly Arg Arg Gly Ser Leu Arg 250 255 245 Asn Asp <210> 3099 <211> 109 <212> PRT <213> Homo sapiens <400> 3099 Met Asp Phe Ser Glu Ser Glu Lys Phe Met Val Leu Leu Trp Lys Asn 1

Phe lle Leu Lys Arg Arg Cys lle Ala Leu Val Val Glu Met Val

Leu Thr Phe Leu Phe Ser Ala Ala Leu Leu Ala Thr Arg Ser Val Ile 40

Thr lle Asn Lys Asn Gly Pro Phe Asp Phe Ala Ala Gln Pro Val Asp

35

25

45

Glu Val Pro Phe Tyr Ile Thr Ala Ser Leu Ile Ser Pro Ser Pro Leu Glu Leu Ala Tyr Val Pro Ser Arg Ser Thr Val Val Gln Gly Ile Ile Glu Arg Val Lys Met Asp Leu Asn Pro Gln Met Lys Gly <210> 3100 <211> 228 <212> PRT <213> Homo sapiens <400> 3100 Met Glu Glu Gln Pro Gln Met Gln Asp Ala Asp Glu Pro Ala Asp Ser Gly Gly Glu Gly Arg Ala Gly Gly Pro Pro Gln Val Ala Gly Ala Gln Ala Ala Cys Ser Glu Asp Arg Met Thr Leu Leu Leu Arg Leu Arg Ala Gln Thr Lys Gln Gln Leu Leu Glu Tyr Lys Ser Met Val Asp Ala Ser Glu Glu Lys Thr Pro Glu Gln Ile Met Gln Glu Lys Gln Ile Glu Ala Lys 11e Glu Asp Leu Glu Asn Glu 11e Glu Glu Val Lys Val Ala Phe Glu lle Lys Lys Leu Ala Leu Asp Ser Val Leu Met Asp Asn Met Lys His Leu Leu Glu Leu Asn Lys Leu He Met Lys Ser Gln Gln Glu Ser Trp Asp Leu Glu Glu Lys Leu Leu Asp lle Arg Lys Lys Arg Leu Gln

Leu Lys Gln Ala Ser Glu Ser Lys Leu Leu Glu 11e Gln Thr Glu Lys

Asn Lys Gln Lys lle Asp Leu Asp Ser Met Glu Asn Ser Glu Arg lle

Lys Ile Ile Arg Gln Asn Leu Gln Met Glu Ile Lys Ile Thr Thr Val Ile Gln His Val Phe Gln Asn Leu Ile Leu Gly Ser Lys Val Asn Trp Ala Glu Asp Pro Ala Leu Lys Glu Ile Val Leu Gln Leu Glu Lys Asn Val Asp Met Met <210> 3101 <211> 219 <212> PRT <213> Homo sapiens <400> 3101 Met Ile His Phe His Leu Ile Phe Leu Tyr Val Ala Arg Asn Lys Thr Leu Gln Met Glu Lys Val Lys Ala Arg Leu Lys Ala Glu Phe Glu Ala Leu Glu Ser Glu Glu Arg His Leu Lys Glu Tyr Lys Gln Glu Thr Asp Leu Leu Leu Gln Glu Lys Met Ala His Val Glu Glu Leu Arg Leu Ile His Ala Asp Ile Asn Val Met Glu Asn Thr Ile Lys Gln Ser Glu Asn Asp Leu Asn Lys Leu Leu Glu Ser Thr Arg Arg Leu His Asp Glu Tyr Lys Pro Leu Lys Glu His Val Asp Ala Leu Arg Met Thr Leu Gly Leu Gln Arg Leu Pro Asp Leu Cys Glu Glu Glu Glu Lys Leu Ser Leu Asp Tyr Phe Glu Lys Gln Lys Ala Glu Trp Gln Thr Glu Pro Gln Glu Pro

Pro Ile Pro Glu Ser Leu Ala Ala Ala Ala Ala Ala Ala Gln Gln Leu

145 150 155 160 Gln Val Ala Arg Lys Gln Asp Thr Arg Gln Thr Ala Thr Phe Arg Gln 170 Gln Pro Pro Pro Met Lys Ala Cys Leu Ser Cys His Gln Gln Ile His 190 180 185 Arg Asn Ala Pro Ile Cys Pro Leu Cys Lys Ala Lys Ser Arg Ser Arg 200 205 Asn Pro Lys Lys Pro Lys Arg Lys Gln Asp Glu 210 215

<210> 3102

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3102 Met Ala Ala Ala Asp Ser Phe Ser Gly Gly Pro Ala Gly Val Arg 5 10 15 Leu Pro Arg Ser Pro Pro Leu Lys Val Leu Ala Glu Gln Leu Arg Arg 20 25 Asp Ala Glu Gly Gly Pro Gly Ala Trp Arg Leu Ser Arg Ala Ala Ala 40 45 Gly Arg Gly Pro Leu Asp Leu Ala Ala Val Trp Met Gln Gly Arg Val 50 55 Val Met Ala Asp Arg Gly Glu Ala Arg Leu Arg Asp Pro Ser Gly Asp 70 75 Phe Ser Val Arg Gly Leu Glu Arg Val Pro Arg Gly Arg Pro Cys Leu 85 90 95 Val Pro Gly Lys Tyr Val Met Val Met Gly Val Val Gln Ala Cys Ser 100 105

Pro Glu Pro Cys Leu Gln Ala Val Lys Met Thr Asp Leu Ser Asp Asn 115 120 125

Pro 11e His Glu Ser Met Trp Glu Leu Glu Val Glu Asp Leu His Arg 130 135 140

Asn Ile Pro

145

<210> 3103

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3103

Met Ile Asp Asp Pro Ser Lys Gly Lys Glu Ala Leu Ala Glu Ser Gly

1 5 10 15

Gly Leu Val Gly Ala Gly Asn Gly Val Phe Phe Pro Ser Thr Glu Ala 20 25 30

Phe Trp Asp Gly Gly Ala Val Leu Ala Ser Arg Gly Leu Glu Leu Ala 35 40 45

Gly Ser Ser Val Pro Cys Cys Glu Arg Phe Gln Asp Phe Asp Leu Ala 50 55 60

Gln Pro Ala Ser Leu His Pro Thr Cys Ala Thr Ala Phe Ser Gln Cys
65 70 75 80

Asp Val Glu Cys Tyr Ser Met Ser Leu Tyr Phe Pro Leu Leu Phe Leu 85 90 95

Val Met Gly Thr Leu Glu Pro Ser 100

<210> 3104

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3104

Met Asp Thr Pro Leu Arg Arg Ser Arg Arg Leu Gly Gly Leu Arg Pro

1 5 10 15

Glu Ser Pro Glu Ser Leu Thr Ser Val Ser Arg Thr Arg Arg Ala Leu 20 25 30

Val Glu Phe Glu Ser Asn Pro Glu Glu Thr Arg Glu Pro Gly Pro Pro

Pro Ser Val Gln Arg Ala Gly Leu Gly Ser Pro Glu Arg Pro Pro Lys Thr Ser Pro Gly Ser Pro Arg Leu Gln Gln Gly Ala Gly Leu Glu Ser Pro Gln Gly Gln Pro Glu Pro Gly Ala Ala Ser Pro Gln Arg Gln Gln Ala Pro Gly Pro Glu Pro Ser Gln Pro Leu Leu Glu Leu Thr Pro Gly Ala Pro Gln His Gln Leu Pro Pro Val Pro Gly Ser Pro Glu Pro Tyr Pro Gly Gln Gln Ala Thr Ser Ser Trp Gly Asp Gly Asp Arg Arg Leu Arg Gly Lys Glu Ala Lys Arg Phe Phe Ile Pro Gly Pro Ser Val Gln Glu Val Glu <210> 3105 <211> 553 <212> PRT <213> Homo sapiens

Met Ala Phe Ser Glu Leu Leu Asp Leu Val Gly Gly Leu Gly Arg Phe Gln Val Leu Gln Thr Met Ala Leu Met Val Ser Ile Met Trp Leu Cys Thr Gln Ser Met Leu Glu Asn Phe Ser Ala Ala Val Pro Ser His Arg Cys Trp Ala Pro Leu Leu Asp Asn Ser Thr Ala Gln Ala Ser Ile Leu Gly Ser Leu Ser Pro Glu Ala Leu Leu Ala Ile Ser Ile Pro Pro Gly

<400> 3105

Pro	Asn	Gln	Arg		His	Gln	Cys	Arg		Phe	Arg	Gln	Pro	Gln	Trp
				85		_			90	_				95	
Gln	Leu	Leu	Asp	Pro	Asn	Ala	Thr	Ala	Thr	Ser	Trp	Ser	Glu	Ala	Asp
			100					105					110		
Thr	Glu	Pro	Cys	Val	Asp	Gly	Trp	Val	Tyr	Asp	Arg	Ser	He	Phe	Thr
		115					120					125			
Ser	Thr	He	Val	Ala	Lys	Trp	Asn	Leu	Val	Cys	Asp	Ser	His	Ala	Leu
	130					135					140				
Lys	Pro	Met	Ala	Gln	Ser	Ile	Tyr	Leu	Ala	Gly	Ile	Leu	Val	Gly	Ala
145					150					155					160
Ala	Ala	Cys	Gly	Pro	Ala	Ser	Asp	Arg	Phe	Gly	Arg	Arg	Leu	Val	Leu
				165					170					175	
Thr	Trp	Ser	Tvr		Gln	Met	Ala	Val		Glv	Thr	Ala	Ala	Ala	Phe
	•		180					185		Ţ			190		
Ala	Pro	Ala		Pro	Val	Tvr	Cvs		Phe	Arg	Phe	Len		Ala	Phe
						- , -	-,-			0					
		195					200					205		-	
Ala	Val	Ala	Gly	Val	Met	Met	Asn	Thr	Gly	Thr	Leu	Leu	Met	Glu	Trp
	210					215					220				
Thr	Ala	Ala	Arg	Ala	Arg	Pro	Leu	Val	Met	Thr	Leu	Asn	Ser	Leu	Gly
225					230					235					240
Phe	Ser	Phe	Gly	His	G1 y	Leu	Thr	Ala	Ala	Va]	Ala	Tyr	Gly	Val	Arg
				245					250					255	
Asp	Trp	Thr	Leu	Leu	G1n	Leu	Val	Val	Ser	Va]	Pro	Phe	Phe	Leu	Cys
·	-		260					265					270		
Phe	Leu	Tvr		Trp	Trp	Leu	Ala	Glu	Ser	Ala	Arg	Trp	Leu	Leu	Thr
		275		•			280				-	285			
Thr	Glv		Leu	Asp	Trp	Glv		Gln	Glu	Leu	Trp		Val	Ala	Ala
	290	0				295					300	Q			
He		Glv	Lvs	Glv	Ala		Gln	Asp	Thr	l.eu		Pro	Glu	Val	l.eu
305		~ ;		,	310					315					320
	Sor	Ala	Mei	Arg		Glu	Leu	Ser	Met		Gln	Pro	Pro	Ala	
1.00	501	713 (1	.,, с. с	325	oru	010	Ecu	001	330	O, ,	0.111	110	,,,	335	561
Lou	Clv	The	Lov		Λκα	Mot	Pro	Clu		A * ~	Pho	Arc	The	Cys	Па
Leu	01 y	1.11.1		Leu	ия	nic t	110	345	Leu	шg	THE	mg	350	Cys	.110
C	T1	1	340	Т	DI	Λ1	DI		DI	Tl	Dl. s	DI		Lau	Α)
ser	ınr	Leu	Cys	$_{\rm rp}$	rne	Ala	rne	OIA	rne	ınr	rne	rne	OIV	Leu	ата

		355					360					365			
Leu	Asp	Leu	G1n	Ala	Leu	Gly	Ser	Asn	Ile	Phe	Leu	Leu	Gln	Met	Phe
	370					375					380				
He	Gly	Val	Val	Asp	He	Pro	Ala	Lys	Met	Gly	Ala	Leu	Leu	Leu	Leu
385					390					395					400
Ser	His	Leu	Gly	Arg	Arg	Pro	Thr	Leu	Ala	Ala	Ser	Leu	Leu	Leu	Ala
				405					410					415	
Gly	Leu	Cys	He	Leu	Ala	Asn	Thr	Leu	Val	Pro	His	Glu	Met	G1 y	Ala
			420					425					430		
Leu	Arg	Ser	Ala	Leu	Ala	Val	Leu	Gly	Leu	Gly	Gly	Val	Gly	Ala	Ala
		435					440					445			
Phe	Thr	Cys	He	Thr	He	Tyr	Ser	Ser	Glu	Leu	Phe	Pro	Thr	Val	Leu
	450					455					460				
Arg	Met	Thr	Ala	Val	Gly	Leu	Gly	Gln	Met	Ala	Ala	Arg	Gly	G1y	Ala
465					470					475					480
He	Leu	Gly	Pro	Leu	Val	Arg	Leu	Leu	Gly	Val	His	Gly	Pro	Trp	Leu
				485					490					495	
Pro	Leu	Leu	Val	Tyr	Gly	Thr	Val	Pro	Val	Leu	Ser	Gly	Leu	Ala	Ala
			500					505					510		
Leu	Leu	Leu	Pro	Glu	Thr	Gln	Ser	Leu	Pro	Leu	Pro	Asp	Thr	lle	Gln
		515					520					525			
Asn	Val	Gln	Asn	Gln	Ala	Val	Lys	Lys	Ala	Thr	His	Gly	Thr	Leu	Gly
	530					535					540				
Asn	Ser	Val	Leu	Lys	Ser	Thr	Gln	Phe							
545					550										

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3106

Met Ala Ala Pro Pro Glu Pro Gly Gly Pro Gly Gly Gly Arg Lys Ser Leu

1 5 10 15

Lys Leu Leu Gly Phe Leu Asp Val Gly Asn Thr Pro Cys Ala Arg His

	20					25					30		
Ser Ile Lo	eu Tyr	Gly	Ser	Leu	Gly	Ser	Val	Val	Ala	Gly	Phe	Gly	His
:	35				40					45			
Phe Leu Pl	ne Thr	Ser	Arg	lle	Arg	Arg	Ser	Cys	Asp	Val	Gly	Va]	G1 y
50				55					60				
Gly Phe II	le Leu	Val	Thr	Leu	Gly	Cys	Trp	Phe	His	Cys	Arg	Tyr	Asn
65			70					75					80
Tyr Ala L	s Gln	Arg	He	Gln	Glu	Arg	Ile	Ala	Arg	Glu	Glu	He	Lys
		85					90					95	
Lys Lys I			Glu	Gly	Thr		Leu	Asp	Pro	Glu		Lys	His
	100					105					110		
Asn Gly Se		Ser	Asn										
i.	15												
<210> 310	7												
<211> 114	•												
<212> PRT													
<213> Home	sapi	ens											
<400> 310	7												
Met Glu TI	nr Cys	Leu	Leu	Pro	Ala	Pro	Leu	Pro	Pro	Ser	Ala	Pro	Ala
1		5					10					15	
Pro Leu Pr	o Arg	Ser	Ala	Pro	Ala	Pro	Leu	Pro	Arg	Ser	Ala	Pro	Ala
	20					25					30		
Pro Leu Pr	ro Pro	Ser	Ala	Pro	Ala	Pro	Leu	Pro	Arg	Ser	Ala	Pro	Ala
	35			e	40			_		45			
Pro Leu Pr	ro Arg	Ser	Ala		Ala	Pro	Leu	Pro		Ser	Ala	Pro	Ala
50		C		55 D	. 1	Б	,	В	60 D	C		D	
Pro Leu Pr	co Arg	Ser		Pro	Ala	Pro	Leu		Pro	Ser	Ala	Pro	
65 Pro Lou Pr	co Ara	Son	70	Dro	Ala	Dro	Lou	75 Pro	Ana	Sor	Vo.1	Dro	80
Pro Leu Pi	g th o	3e1 85	MIa	110	ΝΙα	110	90	110	Alg	261	vai	95	Ила
Pro Leu Pr	o Pro		Val	Pro	Ala	Gln		Ser	Ser	Ser	Len		Leu
.10 204 11	100				,,, u	105	01)	J. C.	~~,		110	u	Lou
Thr Phe													

```
<212> PRT
<213> Homo sapiens
<400> 3108
Met Ser Val Thr Lys Ser Thr Glu Gly Pro Gln Gly Ala Val Ala Ile
                  5
                                     10
Lys Leu Asp Leu Met Ser Pro Pro Glu Ser Ala Lys Lys Leu Glu Asn
             20
                                 25
Lys Asp Ser Thr Phe Leu Asp Glu Ser Pro Ser Glu Ser Ala Gly Leu
         35
                             40
                                                  45
Lys Lys Thr Lys Gly Ile Thr Val Phe Gln Ala Leu Ile His Leu Val
Lys Gly Asn Met Gly Thr Gly Ile Leu Gly Leu Pro Leu Ala Val Lys
                     70
                                          75
                                                              80
Asn Ala Gly Ile Leu Met Gly Pro Leu Ser Leu Leu Val Met Gly Phe
                 85
                                     90
lle Ala Cys His Cys Met His Ile Leu Val Lys Cys Ala Gln Arg Phe
            100
                                105
Cys Lys Arg Leu Asn Lys Pro Phe Met Asp Tyr Gly Asp Thr Val Met
        115
                            120
His Gly Leu Glu Ala Asn Pro Asn Ala Trp Leu Gln Asn His Ala His
                        135
                                             140
Trp Gly Arg His Ile Val Ser Phe Phe Leu Ile Ile Thr Gln Leu Gly
                    150
                                         155
                                                             160
145
Phe Cys Cys Val Tyr Ile Val Phe Leu Ala Asp Asn Leu Lys Gln Val
                165
                                     170
Val Glu Ala Val Asn Ser Thr Thr Asn Asn Cys Tyr Ser Asn Glu Thr
                                185
                                                     190
Val 11e Leu Thr Pro Thr Met Asp Ser Arg Leu Tyr Met Leu Ser Phe
                                                 205
        195
                            200
Leu Pro Phe Leu Val Leu Leu Val Leu Ile Arg Asn Leu Arg Ile Leu
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<210> 3108 <211> 483

	210					215					220				
Thr	He	Phe	Ser	Met	Leu	Ala	Asn	He	Ser	Met	Leu	Val	Ser	Leu	Val
225					230					235					240
He	lle	lle	Gln	Tyr	lle	Thr	Gln	Glu	Ile	Pro	Asp	Pro	Ser	Arg	Leu
				245					250					255	
Pro	Leu	Val	Ala	Ser	Trp	Lys	Thr	Tyr	Pro	Leu	Phe	Phe	Gly	Thr	Ala
			260					265					270		
He	Phe	Ser	Phe	Glu	Ser	Ile	Gly	Val	Val	Leu	Pro	Leu	Glu	Asn	Lys
		275					280					285			
Met	Lys	Asn	Ala	Arg	His	Phe	Pro	Ala	Ile	Leu	Ser	Leu	Gly	Met	Ser
	290					295					300				
He	Val	Thr	Ser	Leu	Tyr	Ile	Gly	Met	Ala	Ala	Leu	Gly	Tyr	Leu	Arg
305					310					315					320
Phe	Gly	Asp	Asp	lle	Lys	Ala	Ser	lle	Ser	Leu	Asn	Leu	Pro	Asn	Cys
				325					330					335	
Trp	Leu	Tyr	Gln	Ser	Val	Lys	Leu	Leu	Tyr	lle	Ala	Gly	lle	Leu	Cys
			340					345					350		
Thr	Tyr	Ala	Leu	Gln	Phe	Tyr	Val	Pro	Ala	Glu	lle	lle	Ile	Pro	Phe
		355					360					365			
Ala	lle	Ser	Arg	Val	Ser	Thr	Arg	Trp	Ala	Leu	Pro	Leu	Asp	Leu	Ser
	370					375					380				
lle	Arg	Leu	Val	Met	Val	Cys	Leu	Thr	Cys	Leu	Leu	Ala	lle	Leu	lle
385					390					395					400
Pro	Arg	Leu	Asp	Leu	Val	He	Ser	Leu	Met	Gly	Ser	Val	Ser	Gly	Thr
				405					410					415	
Ala	Leu	Ala	Leu	He	Ile	Pro	Pro	Leu	Leu	Glu	Val	Pro	Thr	Phe	Tyr
			420					425					430		
Ser	Glu	Gly	Met	Ser	Pro	Leu	Thr	lle	Phe	Lys	Asp	Ala	Leu	He	Ser
		435					440					445			
He	Leu	Gly	Phe	Val	Gly	Phe	Val	Val	Gly	Thr	Tyr	Gln	Ala	Leu	Asp
	450					455					460				
Glu	Leu	Leu	Lys	Ser	Glu	Asp	Ser	His	Pro	Phe	Ser	Asn	Ser	Thr	Thr
465					470					475					480
Phe	Val	Arg													

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<211> 225
<212> PRT
<213> Homo sapiens
<400> 3109
Met Pro Leu Ser Pro Leu Trp Ser Val Leu Phe Phe 11e Met Leu Phe
                  5
 1
                                     10
                                                          15
Cys Leu Gly Leu Ser Ser Met Phe Gly Asn Met Glu Gly Val Val Val
             20
                                 25
Pro Leu Gln Asp Leu Arg Val Ile Pro Pro Lys Trp Pro Lys Glu Val
                             40
                                                 45
Leu Thr Gly Leu Ile Cys Leu Gly Thr Phe Leu Ile Gly Phe Ile Phe
     50
                         55
Thr Leu Asn Ser Gly Gln Tyr Trp Leu Ser Leu Leu Asp Ser Tyr Ala
                     70
                                          75
Gly Ser Ile Pro Leu Leu Ile Ile Ala Phe Cys Glu Met Phe Ser Val
                 85
                                     90
                                                          95
Val Tyr Val Tyr Gly Val Asp Arg Phe Asn Lys Asp 11e Glu Phe Met
            100
                                105
                                                     110
Ile Gly His Lys Pro Asn Ile Phe Trp Gln Val Thr Trp Arg Val Val
                            120
                                                 125
Ser Pro Leu Leu Met Leu IIe 11e Phe Leu Phe Phe Phe Val Val Glu
    130
                        135
Val Ser Gln Glu Leu Thr Tyr Ser Ile Trp Asp Pro Gly Tyr Glu Glu
                    150
                                         155
Phe Pro Lys Ser Gln Lys Ile Ser Tyr Pro Asn Trp Val Tyr Val Val
                165
                                    170
                                                         175
Val Val Ile Val Ala Gly Val Pro Ser Leu Thr lle Pro Gly Tyr Ala
            180
                                185
                                                     190
lle Tyr Lys Leu lle Arg Asn His Cys Gln Lys Pro Gly Asp His Gln
                            200
                                                 205
Gly Leu Val Ser Thr Leu Ser Thr Ala Ser Met Asn Gly Asp Leu Lys
   210
                        215
                                             220
Tyr
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<210> 3110

<211> 367 <212> PRT <213> Homo sapiens <400> 3110 Met Cys Gly Asp Gly Thr Asn Asp Val Gly Ala Leu Lys His Ala Asp Val Gly Val Ala Leu Leu Ala Asn Ala Pro Glu Arg Val Val Glu Arg Arg Arg Arg Pro Arg Asp Ser Pro Thr Leu Ser Asn Ser Gly 11e Arg Ala Thr Ser Arg Thr Ala Lys Gln Arg Ser Gly Leu Pro Pro Ser Glu Glu Gln Pro Thr Ser Gln Arg Asp Arg Leu Ser Gln Val Leu Arg Asp Leu Glu Asp Glu Ser Thr Pro 11e Val Lys Leu Gly Asp Ala Ser 11e Ala Ala Pro Phe Thr Ser Lys Leu Ser Ser Ile Gln Cys Ile Cys His Val Ile Lys Gln Gly Arg Cys Thr Leu Val Thr Thr Leu Gln Met Phe Lys lle Leu Ala Leu Asn Ala Leu lle Leu Ala Tyr Ser Gln Ser Val Leu Tyr Leu Glu Gly Val Lys Phe Ser Asp Phe Gln Ala Thr Leu Gln Gly Leu Leu Leu Ala Gly Cys Phe Leu Phe Ile Ser Arg Ser Lys Pro Leu Lys Thr Leu Ser Arg Glu Arg Pro Leu Pro Asn Ile Phe Asn Leu Tyr Thr Ile Leu Thr Val Met Leu Gln Phe Phe Val His Phe Leu Ser Leu Val Tyr Leu Tyr Arg Glu Ala Gln Ala Arg Ser Pro Glu Lys Gln

		210					215					220				
Gl	u	Gln	Phe	Val	Asp	Leu	Tyr	Lys	Glu	Phe	Glu	Pro	Ser	Leu	Val	Asn
22	5					230					235					240
Se	r	Thr	Val	Туг	He	Met	Ala	Met	Ala	Met	Gln	Met	Ala	Thr	Phe	Ala
					245					250					255	
IJ	е	Asn	Tyr	Lys	Val	Arg	Pro	Gly	Pro	Cys	Pro	Asn	lle	His	Cys	Leu
				260					265					270		
Pr	о.	Thr	Gln	Pro	His	Pro	Met	Lys	Pro	Ser	Val	Pro	His	Pro	His	Arg
			275					280					285			
Al	а	Arg	Pro	Ser	Trp	Arg	Ala	Cys	Pro	Arg	Thr	Ser	Pro	Trp	Cys	Gly
		290					295					300				
Va	1	Trp	Gln	Phe	His	Ser	Trp	Pro	Ser	Leu	Ala	Cys	Ser	Ser	Ala	Pro
30	5					310					315	•				320
Ar	·g	Pro	Thr	Ser	Thr	Ala	Ser	Leu	Ala	Ser	Trp	Thr	Ser	Leu	Trp	Ser
					325					330					335	
Se	r	Ser	Trp	Ser	Leu	Pro	Arg	Ser	Cys	Ser	Trp	Thr	Ser	Ala	Trp	Arg
				340					345					350		
Se	er	Trp	Pro	Thr	Ala	Ser	Cys	Ser	Ser	Ser	Trp	Gly	Pro	Arg	Ser	
			355					360					365		•	

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3111

Leu Tyr Arg Val Val Gly Val Ser Ser Lys Val Gln Arg Leu Leu Ser

65					70					75					80
Met	Leu	Met	Asp	Val	Lys	Thr	Cys	Asn	Glu	Val	Asp	Leu	Glu	Asn	Ser
				85					90					95	
Ala	Asp	Trp	Glu	Va]	Lys	Thr	lle	Thr	Ser	Ala	Leu	Lys	Gln	Tyr	Leu
			100					105					110		
Arg	Ser	Leu	Pro	Glu	Pro	Leu	Met	Thr	Tyr	Glu	Leu	His	Gly	Asp	Phe
		115					120					125			
He	Val	Pro	Ala	Lys	Ser	Gly	Ser	Pro	Glu	Ser	Arg	Val	Asn	Ala	lle
	130					135					140				
His	Phe	Leu	Val	His	Lys	Leu	Pro	Glu	Lys	Asn	Lys	Glu	Met	Leu	Asp
145					150					155					160
He	Leu	Val	Lys	His	Leu	Thr	Asn	Val	Ser	Asn	His	Ser	Lys	Gln	Asn
				165					170					175	
Leu	Met	Thr	Va]	Ala	Asn	Leu	Gly	Val	Va]	Phe	Gly	Pro	Thr	Leu	Met
			180					185					190		
Arg	Pro	Gln	Glu	Glu	Thr	Val	Ala	Ala	Leu	Met	Asp	Leu	Lys	Phe	Gln
		195					200					205			
Asn	Πe	Val	Val	Glu	Ile	Leu	Ile	Glu	Asn	His	Glu	Lys	lle	Phe	Arg
	210					215					220				
Thr	Pro	Pro	Asp	Thr	Thr	Phe	Pro	Glu	Pro	Thr	Cys	Leu	Ser	Ala	Ser
225					230					235					240
Pro	Pro	Asn	Ala	Pro	Pro	Arg	Gln	Ser	Lys	Arg	Gln	Gly	Gln	Arg	Thr
				245					250					255	
Lys	Arg	Pro	Val	Ala	Va]	Tyr	Asn	Leu	Cys	Leu	Glu	Leu	Glu	Asp	G1 y
			260					265					270		
Asp	Asn	Pro	Tyr	Pro	Ser	Lys	Glu	Asp	Thr	Pro	Thr	Ser	Ser	Leu	Asp
		275										285			
Ser	Leu	Ser	Ser	Pro	Ser	Pro	Val	Thr	Thr	Ala	Val	Pro	Gly	Pro	Pro
	290					295					300				
Gly	Pro	Asp	Lys	Asn		Leu	Leu	Ala	Asp		Gly	Ser	Phe	G1 y	-
305					310					315					320
Trp	Ala	Ser	Thr		He	Arg	Ser	Arg		Ala	Arg	Ala	Val		Pro
				325					330					335	
Cys	Glu	Ala		His	Ser	Ser	Glu		Ser	Phe	Glu	He		Ala	He
			340			_		345	_		_		350		
Pho	Glu	Acn	Val	Gln	Thr	Sor	Ara	Clu	Pro	G1v	Trn	Leu	Glu	Glv	Thr

360 365 Leu Asn Gly Lys Arg Gly Leu Ile Pro Gln Asn Tyr Val Glu Leu Leu 375 380 <210> 3112 <211> 815 <212> PRT <213> Homo sapiens <400> 3112 Met 11e Leu Gly Ala Met Leu Asn 11e Val Gln Asp Ser Ala Leu Leu 10 Glu Ala Ile Gly Cys Gln Met Glu Met Gly Gly Gly Glu Asn Asn Leu 25 Lys Ser Arg Ser Arg Thr Asn Ser Gly Ile Ser Ser Ala Ser Gly Gly 40 Ser Thr Glu Pro Thr Thr Pro Asp Ser Glu Arg Pro Ala Gln Ala Leu 50 55 60 Leu Arg Asp Tyr Ala Leu Asn Thr Asp Ser Ala Ala Gly Leu Leu Ile 65 70 75 Arg Ser Ile His Leu Val Thr Gln Arg Leu Asn Ser Gln Trp Arg Gln Asp Met Ser lle Ser Leu Ala Ala Leu Glu Leu Leu Ser Gly Leu Ala 100 105 110 Lys Val Lys Val Met Val Asp Ser Gly Asp Arg Lys Arg Ala Ile Ser 120 Ser Val Cys Thr Tyr lle Val Tyr Gln Cys Ser Arg Pro Ala Pro Leu 130 135 140 His Ser Arg Asp Leu His Ser Met Ile Val Ala Ala Phe Gln Cys Leu 145 150 155 Cys Val Trp Leu Thr Glu His Pro Asp Met Leu Asp Glu Lys Asp Cys 170 Leu Lys Glu Val Leu Glu lle Val Glu Leu Gly Ile Ser Gly Ser Lys 190 180 185

Ser Lys Asn Asn Gly Gln Glu Val Lys Tyr Lys Gly Asp Lys Glu Pro

		195					200					205			
Asn	Pro	Ala	Ser	Met	Arg	Val	Lys	Asp	Ala	Ala	Glu	Ala	Thr	Leu	Thr
	210					215					220				
Cys	lle	Met	Gln	Leu	Leu	Gly	Ala	Phe	Pro	Ser	Pro	Ser	Gly	Pro	Ala
225					230					235					240
Ser	Pro	Cys	Ser	Leu	Val	Asn	Glu	Thr	Thr	Leu	He	Lys	Tyr	Ser	Arg
				245					250					255	
Leu	Pro	Thr	lle	Asn	Lys	His	Ser	Phe	Arg	Tyr	Phe	Val	Leu	Asp	Asn
			260					265					270		
Ser	Val	lle	Leu	Ala	Met	Leu	Glu	Gln	Pro	Leu	Gly	Asn	Glu	Gln	Asn
		275					280					285			
Asp	Phe	Phe	Pro	Ser	Val	Thr	Val	Leu	Val	Arg	Gly	Met	Ser	Gly	Arg
	290					295					300				
Leu	Ala	Trp	Ala	Gln	Gln	Leu	Cys	Leu	Leu	Pro	Arg	Gly	Ala	Lys	Ala
305					310					315					320
Asn	Gln	Lys	Leu	Phe	Val	Pro	Glu	Pro	Arg	Pro	Val	Pro	Lys	Asn	Asp
				325					330					335	
Val	Gly	Phe	Lys	Tyr	Ser	Val	Lys	His	Arg	Pro	Phe	Pro	Glu	Glu	Val
			340					345					350		
Asp	Lys	He		Phe	Val	Lys	Ala		Leu	Ser	Ile	Pro		Leu	His
Asp	Lys	11e 355		Phe	Val	Lys	Ala 360		Leu	Ser	Ile	Pro 365		Leu	His
		355	Pro				360	Asp				365	Asp	Leu Arg	
		355	Pro				360	Asp				365	Asp		
Glu	11e 370	355 Val	Pro Thr	Glu	Glu	Leu 375	360 Glu	Asp Glu	Arg	His	Glu 380	365 Lys	Asp Leu		Ser
Glu	11e 370	355 Val	Pro Thr	Glu	Glu	Leu 375	360 Glu	Asp Glu	Arg	His	Glu 380	365 Lys	Asp Leu	Arg	Ser
Glu Gly 385	11e 370 Met	355 Val Ala	Pro Thr Gln	Glu Gln	Glu 11e 390	Leu 375 Ala	360 Glu Tyr	Asp Glu Glu	Arg	His His	G1u 380 Leu	365 Lys Glu	Asp Leu Gln	Arg	Ser Ser 400
Glu Gly 385	11e 370 Met	355 Val Ala	Pro Thr Gln	Glu Gln	Glu 11e 390 Lys	Leu 375 Ala	360 Glu Tyr	Asp Glu Glu	Arg lle	His His	G1u 380 Leu Pro	365 Lys Glu	Asp Leu Gln	Arg Gln	Ser Ser 400
Glu Gly 385 Glu	lle 370 Met Glu	355 Val Ala Glu	Pro Thr Gln Leu	Glu Gln Gln 405	Glu 11e 390 Lys	Leu 375 Ala Arg	360 Glu Tyr Ser	Asp Glu Glu Phe	Arg lle Pro 410	His His 395 Asp	Glu 380 Leu Pro	365 Lys Glu Val	Asp Leu Gln Thr	Arg Gln Asp	Ser Ser 400 Cys
Glu Gly 385 Glu	lle 370 Met Glu	355 Val Ala Glu	Pro Thr Gln Leu	Glu Gln Gln 405	Glu 11e 390 Lys	Leu 375 Ala Arg	360 Glu Tyr Ser	Asp Glu Glu Phe	Arg lle Pro 410	His His 395 Asp	Glu 380 Leu Pro	365 Lys Glu Val	Asp Leu Gln Thr	Arg Gln Asp 415	Ser Ser 400 Cys
Glu Gly 385 Glu Lys	lle 370 Met Glu Pro	355 Val Ala Glu Pro	Pro Thr Gln Leu Pro 420	Glu Gln Gln 405 Pro	Glu lle 390 Lys Ala	Leu 375 Ala Arg Gln	360 Glu Tyr Ser Glu	Asp Glu Glu Phe Phe 425	Arg lle Pro 410 Gln	His 395 Asp	Glu 380 Leu Pro	365 Lys Glu Val	Asp Leu Gln Thr Leu 430	Arg Gln Asp 415	Ser Ser 400 Cys Leu
Glu Gly 385 Glu Lys	lle 370 Met Glu Pro	355 Val Ala Glu Pro	Pro Thr Gln Leu Pro 420	Glu Gln Gln 405 Pro	Glu lle 390 Lys Ala	Leu 375 Ala Arg Gln	360 Glu Tyr Ser Glu	Asp Glu Glu Phe Phe 425	Arg lle Pro 410 Gln	His 395 Asp	Glu 380 Leu Pro	365 Lys Glu Val	Asp Leu Gln Thr Leu 430	Arg Gln Asp 415 Phe	Ser Ser 400 Cys Leu
Glu Gly 385 Glu Lys	lle 370 Met Glu Pro	355 Val Ala Glu Pro Phe 435	Pro Thr Gln Leu Pro 420 Gly	Glu Gln Gln 405 Pro	Glu 11e 390 Lys Ala	Leu 375 Ala Arg Gln Ser	360 Glu Tyr Ser Glu Leu 440	Asp Glu Glu Phe 425 Glu	Arg lle Pro 410 Gln	His 395 Asp Thr	Glu 380 Leu Pro Ala Lys	365 Lys Glu Val Arg Glu 445	Asp Leu Gln Thr Leu 430 Pro	Arg Gln Asp 415 Phe	Ser Ser 400 Cys Leu Asn
Glu Gly 385 Glu Lys	lle 370 Met Glu Pro	355 Val Ala Glu Pro Phe 435	Pro Thr Gln Leu Pro 420 Gly	Glu Gln Gln 405 Pro	Glu 11e 390 Lys Ala	Leu 375 Ala Arg Gln Ser	360 Glu Tyr Ser Glu Leu 440	Asp Glu Glu Phe 425 Glu	Arg lle Pro 410 Gln	His 395 Asp Thr	Glu 380 Leu Pro Ala Lys	365 Lys Glu Val Arg Glu 445	Asp Leu Gln Thr Leu 430 Pro	Arg Gln Asp 415 Phe	Ser Ser 400 Cys Leu Asn
Glu Gly 385 Glu Lys Ser	lle 370 Met Glu Pro His Arg 450	355 Val Ala Glu Pro Phe 435 Leu	Pro Thr Gln Leu Pro 420 Gly Pro	Glu Gln Gln 405 Pro Phe	Glu 11e 390 Lys Ala Leu	Leu 375 Ala Arg Gln Ser Leu 455	360 Glu Tyr Ser Glu Leu 440 Ile	Asp Glu Glu Phe 425 Glu Ala	Arg 11e Pro 410 Gln Ala Leu	His 395 Asp Thr Leu	Glu 380 Leu Pro Ala Lys Ser 460	365 Lys Glu Val Arg Glu 445 Thr	Asp Leu Gln Thr Leu 430 Pro	Arg Gln Asp 415 Phe	Ser 400 Cys Leu Asn Gly
Glu Gly 385 Glu Lys Ser	lle 370 Met Glu Pro His Arg 450	355 Val Ala Glu Pro Phe 435 Leu	Pro Thr Gln Leu Pro 420 Gly Pro	Glu Gln Gln 405 Pro Phe	Glu 11e 390 Lys Ala Leu	Leu 375 Ala Arg Gln Ser Leu 455	360 Glu Tyr Ser Glu Leu 440 Ile	Asp Glu Glu Phe 425 Glu Ala	Arg 11e Pro 410 Gln Ala Leu	His 395 Asp Thr Leu	Glu 380 Leu Pro Ala Lys Ser 460	365 Lys Glu Val Arg Glu 445 Thr	Asp Leu Gln Thr Leu 430 Pro	Arg Gln Asp 415 Phe Ala	Ser 400 Cys Leu Asn Gly

				485					490					495	
Glu	He	Leu	Lys	Asn	Val	Glu	Ser	Ser	Arg	Thr	Val	Gln	Pro	His	Phe
			500					505					510		
Leu	Glu	Phe	Leu	Leu	Ser	Leu	Gly	Trp	Ser	Val	Asp	Val	Gly	Arg	His
		515					520					525			
Pro	Gly	Trp	Thr	Gly	His	Val	Ser	Thr	Ser	Trp	Ser	lle	Asn	Cys	Cys
	530					535					540				
Asp	Asp	Gly	Glu	Gly	Ser	Gln	Gln	Glu	Glu	Val	Ile	Ser	Ser	Glu	Asp
545					550					555					560
Ile	Gly	Ala	Ser	lle	Phe	Asn	Gly	Gln	Lys	Lys	Val	Leu	Tyr	Tyr	Ala
				565					570					575	
Asp	Ala	Leu	Thr	Glu	lle	Ala	Phe	.Val	Val	Pro	Ser	Pro	Va1	Glu	Ser
			580					585					590		
Leu	Thr	Asp	Ser	Leu	Glu	Ser	Asn	Пе	Ser	Asp	Gln	Asp	Ser	Asp	Ser
		595					600					605			
Asn	Met	Asp	Leu	Met	Pro	Gly	11e	Leu	Lys	G]n	Pro	Ser	Leu	Thr	Leu
	610					615					620				
Glu	Leu	Phe	Pro	Asn	His	Thr	Asp	Asn	Leu	Asn	Ser	Ser	Gln	Arg	Leu
625					630					635					640
Gly	Pro	Ser	Ser	Arg	Met	Arg	Lys	Leu	Pro	Gln	Gly	Arg	Pro	Val	Pro
				645					650					655	
Pro	Leu	Gly	Pro	Glu	Thr	Arg	Val	Ser	Va1	Val	Trp	Val	Glu	Arg	Tyr
			660					665					670		
Asp	Asp	11e	Glu	Asn	Phe	Pro	Leu	Ser	Glu	Leu	Met	Thr	Glu	Ile	Ser
		675					680					685			
Thr	Gly	Val	Glu	Thr	Thr	Ala	Asn	Ser	Ser	Thr	Ser	Leu	Arg	Ser	Thr
	690					695					.700				
Thr	Leu	Glu	Lys	Glu	Val	Pro	Val	He	Phe	lle	His	Pro	Leu	Asn	Thr
705					710					715					720
Gly	Leu	Phe	Arg	He	Lys	He	Gln	Gly		Thr	Gly	Lys	Phe		Met
				725					730					735	
Val	He	Pro	Leu	Val	Asp	Gly	Met	He	Val	Ser	Arg	Arg	Ala	Leu	Gly
			740					745					750		
Phe	Leu		Arg	Gln	Thr	Val		Asn	11e	Cys	Arg		Lys	Arg	Leu
		755					760					765			
Glu	Ser	Asp	Ser	Tyr	Ser	Pro	Pro	His	Val	Arg	Arg	Lys	Gln	Lys	·He

770 775 780

Thr Asp Ile Val Asn Lys Tyr Arg Asn Lys Gln Leu Glu Pro Glu Phe 785 790 795 800

Tyr Thr Ser Leu Phe Gln Glu Val Gly Leu Lys Asn Cys Ser Ser 805 810 815

<210>3113
<211>102
<212> PRT
<213> Homo sapiens
Ala Thr Pro Trp Ser Ala Phe Thr Arg Pro Gly Asn

Met Gly Thr Ser Ala Thr Pro Trp Ser Ala Phe Thr Arg Pro Gly Asn

1 5 10 15

Thr Ala Gln Ser Leu Arg Pro Gly Arg Pro Leu Gly Ser Arg Gly Gly

20 25 30

Glu Ala Val Gly Val Ala Ser Gly Arg Arg Ser Arg Glu Pro His Phe

35 40 45

Pro Glu Cys Arg Ala Gln Pro Arg Pro Ala Arg Pro Ala Pro Arg Gly
50 55 60

Arg Gly Ser Arg Gly Leu Arg Arg Glu Asp Ala Lys Arg Pro Pro Gly
65 70 75 80

Leu Arg Gly Ala Ala Gln Glu Ser Ala Arg Pro Pro Gly Ala Arg Ala 85 90 95

Gly Leu Val Arg Phe Arg

100

<210> 3114

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3114

Met Val Ser Lys His Val Pro Trp Ser Pro Ala Ser Lys His Ser lle

10 15 Ala His Thr Ala Ser Leu Ser Leu Gly Ser Ser His Thr Phe Ser Arg 25 Val Arg Ala Val Ser Val Gly Ser Gly Glu Ala Thr Glu Thr Ala Thr Gly Ser Leu Lys Ser Ala Arg Ala Ser Leu Gly Arg Cys Leu Glu Asn 55 Thr Pro Gly Asp Ile Val Ser Ser Leu Ala Ser Glu Met Leu Cys Ser 70 75 80 Tyr Phe Arg Ser Ser Leu Lys Leu Ser Gly Met Leu Pro Ser Leu Ser 85 90 Cys Phe Ser Ser Cys Cys Gly Pro Gln Val Gln Gly Leu Thr Ser Glu 100 105 110 Cys

<210> 3115

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3115

Met Gln Val Gln Leu Pro His Pro His Ser Leu Gly Thr Asn Ala Gly
1 5 10 15

Ala Ala Ser Pro Ser Pro Leu Phe Arg His Lys Cys Arg Cys Ser Phe 20 25 30

Pro lle Pro Thr Leu Arg Ala Gln Met Gln Val Gln Leu Pro His Pro 35 40 45

His Ser Leu Gly Thr Asn Ala Gly Ala Ala Ser Pro Ser Pro Leu Phe 50 55 60

Arg His Lys Cys Arg Cys Ser Phe Pro lle Pro Thr Leu Arg Ala Gln 65 70 75 80

Met Gln Val Gln Leu Pro His Pro His Ser Leu Gly Thr Asn Ala Gly
85 90 95

Ala Ala Ser Pro Ser Pro Leu Leu Gly His Lys Cys Arg Cys Ser Phe

Pro lle Pro Thr Leu Arg Ala Gln Met Gln Val Gln Leu Pro His Pro His Ser Leu Gly Thr Asn Ala Gly Ala Ala Ser Pro Ser Pro Leu Leu Gly His Lys Cys Arg Cys Ser Phe Pro Ile Pro Thr Leu <210> 3116 <211> 525 <212> PRT <213> Homo sapiens <400> 3116 Met Ala Gly Leu Trp Leu Gly Leu Val Trp Gln Lys Leu Leu Leu Trp Gly Ala Ala Ser Ala Leu Ser Leu Ala Gly Ala Ser Leu Val Leu Ser Leu Leu Gln Arg Val Ala Ser Tyr Ala Arg Lys Trp Gln Gln Met Arg Pro Ile Pro Thr Val Ala Arg Ala Tyr Pro Leu Val Gly His Ala Leu Leu Met Lys Pro Asp Gly Arg Glu Phe Phe Gln Gln Ile Ile Glu Tyr Thr Glu Glu Tyr Arg His Met Pro Leu Leu Lys Leu Trp Val Gly Pro Val Pro Met Val Ala Leu Tyr Asn Ala Glu Asn Val Glu Val Ile Leu Thr Ser Ser Lys Gln Ile Asp Lys Ser Ser Met Tyr Lys Phe Leu Glu Pro Trp Leu Gly Leu Gly Leu Leu Thr Ser Thr Gly Asn Lys Trp Arg Ser Arg Arg Lys Met Leu Thr Pro Thr Phe His Phe Thr 11e Leu Glu

Asp	Phe	Leu	Asp	He	Met	Asn	Glu	Gln	Ala	Asn	He	Leu	Val	Lys	Lys
				165					170					175	
Leu	Glu	Lys	His	He	Asn	Gln	Glu	Ala	Phe	Asn	Cys	Phe	Phe	Tyr	He
			180					185					190		
Thr	Leu	Cys	Ala	Leu	Asp	He	Пе	Cys	Glu	Thr	Ala	Met	Gly	Lys	Asn
		195					200					205			
Ile	Gly	Ala	Gln	Ser	Asn	Asp	Asp	Ser	Glu	Tyr	Val	Arg	Ala	Val	Tyr
	210					215					220				
Arg	Met	Ser	Glu	Met	Ile	Phe	Arg	Arg	lle	Lys	Met	Pro	Trp	Leu	Trp
225					230					235					240
Leu	Asp	Leu	Trp	Tyr	Leu	Met	Phe	Lys	Glu	Gly	Trp	Glu	His	Lys	Lys
				245					250					255	
Ser	Leu	Lys	He	Leu	His	Thr	Phe	Thr	Asn	Ser	Val.	Пе	Ala	Glu	Arg
			260					265					270		
Ala	Asn	Glu	Met	Asn	Ala	Asn	Glu	Asp	Cys	Arg	Gly	Asp	Gly	Arg	Gly
		275					280					285			
Ser	Ala	Pro	Ser	Lys	Asn	Lys	Arg	Arg	Ala	Phe	Leu	Asp	Leu	Leu	Leu
	290					295					300				
Ser	Val	Thr	Asp	Asp	Glu	Gly	Asn	Arg	Leu	Ser	His	Glu	Asp	lle	Arg
305					310					315					320
Glu	Glu	Val	Asp	Thr	Phe	Met	Phe	Glu	Gly	His	Asp	Thr	Thr	Ala	Ala
				325					330					335	
Ala	He	Asn	Trp	Ser	Leu	Tyr	Leu	Leu	Gly	Ser	Asn	Pro	Glu	Val	Gln
			340					345					350		
Lys	Lys	Val	Asp	His	Glu	Leu	Asp	Asp	Val	Phe	Gly	Lys	Ser	Asp	Arg
		355					360					365			
Pro	Ala	Thr	Val	Glu	Asp	Leu	Lys	Lys	Leu	Arg	Tyr	Leu	Glu	Cys	Val
	370					375					380				
lle	Lys	Glu	Thr	Leu	Arg	Leu	Phe	Pro	Ser	Val	Pro	Leu	Phe	Ala	Arg
385					390					395					400
Ser	Val	Ser	Glu	Asp	Cys	Glu	Val	Ala	Gly	Tyr	Arg	Val	Leu	Lys	Gly
				405					410					415	
Thr	Glu	Ala	Val	He	He	Pro	Tyr	Ala	Leu	His	Arg	Asp	Pro	Arg	Tyr
			420					425					430		
Phe	Pro	Asn	Pro	Glu	Glu	Phe	Gln	Pro	Glu	Arg	Phe	Phe	Pro	Glu	Asn
		435					440					445			

Ala Gln Gly Arg His Pro Tyr Ala Tyr Val Pro Phe Ser Ala Gly Pro Arg Asn Cys Ile Gly Gln Lys Phe Ala Val Met Glu Glu Lys Thr Ile Leu Ser Cys Ile Leu Arg His Phe Trp Ile Glu Ser Asn Gln Lys Arg Glu Glu Leu Gly Leu Glu Gly Gln Leu Ile Leu Arg Pro Ser Asn Gly Ile Trp Ile Lys Leu Lys Arg Arg Asn Ala Asp Glu Arg

<210> 3117

<211> 172

<212> PRT

<213> Homo sapiens

<400> 3117

Met Leu Thr Glu Val Met Glu Val Trp His Gly Leu Val 11e Ala Val Val Ser Leu Phe Leu Gln Ala Cys Phe Leu Thr Ala lle Asn Tyr Leu Leu Ser Arg His Met Ala His Lys Ser Glu Gln Ile Leu Lys Ala Ala Ser Leu Gln Val Pro Arg Pro Ser Pro Gly His His His Pro Pro Ala Val Lys Glu Met Lys Glu Thr Gln Thr Glu Arg Asp lle Pro Met Ser Asp Ser Leu Tyr Arg His Asp Ser Asp Thr Pro Ser Asp Ser Leu Asp Ser Ser Cvs Ser Ser Pro Pro Ala Cvs Gln Ala Thr Glu Asp Val Asp Tyr Thr Gln Val Val Phe Ser Asp Pro Gly Glu Leu Lys Asn Asp Ser

Pro Leu Asp Tyr Glu Asn Ile Lys Glu Ile Thr Asp Tyr Val Asn Val

<210> 3118

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3118

Met Phe Ser Cys Leu Lys Lys Asn Lys His His Gln Gln Pro Phe Pro 1 5 10 15

Met Gly Ser Ser Ser Arg Cys Tyr His Lys Arg Asp Arg Gln Met Asp
20 25 30

Ile Ile Ala Lys Arg Leu Ser Asn Trp Val Pro Arg Ser Arg Gly Val
35 40 45

Glu Pro Leu Phe Arg Thr Val Gln Val Lys Gln Gly Ala Gly Asn Lys
50 55 60

Ala Gly Tyr Tyr Asn Pro Thr Asn Trp Val Pro Arg Ser Gln Gly Cys
65 70 75 80

Gly Ala Pro Leu Gln Asp Cys Thr Gly Glu Ala Gly Gly Trp Glu Gln 85 90 95

Gly Arg Leu Leu

100

<210> 3119

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3119

Met Pro Arg Ser Ser Val Arg Phe Ser Leu Phe Pro His Val Gln Pro

1 5 10 15

Ile Val Phe Lys Glu Lys Leu Thr Met Lys Thr Gly Leu Leu Met Glu 25 Glu Lys Leu Glu Cys Ser Leu Trp Cys Cys Leu Ser Asp Pro Ser Ile 35 40 45 Pro Gly Arg Cys Cys Val Leu Glu Arg His Ile Val Pro Trp Met Gln 60 55 Gln Leu His Gln Gln Trp Lys Trp Leu Ile Cys Gly Leu Cys Arg Leu 70 75 Tyr Asn Leu Pro Lys His Pro Asn Val Glu Met Pro Asp Gln Pro Leu 85 90 Pro Met Gly Gln Asn Gly Thr Thr Glu Glu Val Thr Ser Lys Glu Glu 105 Glu Glu Glu Glu Met Asp Glu Asp lle Glu Asp Leu Asp His Cys Glu 120 125 Met Lys Glu Glu Pro Thr Ser Glu Lys Lys Leu Glu Asp Glu Gly Thr 135 Glu Lys Glu Asn Trp Ala Ile Leu Glu Lys Ile Arg Lys Thr Glu Arg 155 150 Gln Gly His Leu Asn Val Leu Thr Leu Ile Val Leu Cys Thr Val Ile 165 170 175 Phe Arg Ser

<210> 3120

<211> 742

<212> PRT

<213> Homo sapiens

<400> 3120

 Met Glu Ser Gly Thr Ser Ser Pro Gln Pro Pro Gln Leu Asp Pro Leu

 1
 5
 10
 15

 Asp Ala Phe Pro Gln Lys Gly Leu Glu Pro Gly Asp Ile Ala Val Leu
 20
 25
 30

 Val Leu Tyr Phe Leu Phe Val Leu Ala Val Gly Leu Trp Val Gly Ser
 35
 40
 45

Pro	Ser	Val	Ala	Gln	Gly	Thr	Arg	Thr	Gln	Trp	Trp	Gln	Ser	Trp	Leu
	50					55					60				
Thr	Pro	Ala	Ser	Thr	Ser	Trp	Ala	Gln	Val	lle	Leu	Ser	Pro	Arg	Leu
65					70					75					80
Pro	Asp	Thr	Glu	Glu	Val	Leu	Ser	Thr	۸rg	Asn	Arg	Leu	Ser	Pro	Asp
				85					90					95	
Thr	Lys	Pro	Leu	Gly	Ala	Leu	Ile	Leu	Asn	Phe	Gln	Val	Ser	Arg	He
			100					105					110		
Ser	Thr	Val	Lys	Thr	Lys	Arg	Asp	Thr	Val	Lys	Gly	Tyr	Phe	Leu	Ala
		115					120					125			
Gly	Gly	Asp	Met	Val	Trp	Trp	Pro	Val	Gly	Ala	Ser	Leu	Phe	Ala	Ser
	130					135					140				
Asn	Val	Gly	Ser	Gly	His	Phe	He	Gly	Leu	Ala	Gly	Ser	Gly	Ala	Ala
145					150					155					160
Thr	Gly	He	Ser	Val	Ser	Ala	Tyr	Glu	Leu	Asn	Gly	Leu	Phe	Ser	Val
				165					170					175	
Leu	Met	Leu	Ala	Trp	Ile	Phe	Leu	Pro	lle	Tyr	Ile	Ala	Gly	Gln	Val
			180					185					190		
Thr	Thr	Met	Pro	Glu	Tyr	Leu	Arg	Lys	Arg	Phe	Gly	Gly	Ile	Arg	Ile
		195					200					205			
Pro	lle	lle	Leu	Ala	Val	Leu	Tyr	Leu	Phe	lle	Tyr	He	Phe	Thr	Lys
	210					215					220				
Ile	Ser	Val	Asp	Met	Tyr	Ala	Gly	Ala	lle	Phe	11e	Gln	Gln	Ser	Leu
225					230					235					240
His	Leu	Asp	Leu	Tyr	Leu	Ala	He	Ala	Gly	Leu	Leu	Ala	He	Thr	Ala
				245					250					255	
Val	Tyr	Thr	Val	Ala	Gly	Gly	Leu	Ala	Ala	Val	He	Tyr	Thr	Asp	Λla
			260					265					270		
Leu	Gln	Thr	Leu	11e	Met	Leu	lle	Gly	Ala	Leu	Thr	Leu	Met	G1 y	Tyr
		275					280					285			
Ser	Phe	Ala	Ala	Val	G1 y	Gly	Met	G] u	Gly	Leu	Lys	Glu	Lys	Tyr	Phe
	290					295					300				
Leu	Ala	Leu	Ala	Ser	Asn	Arg	Ser	Glu	Asn	Ser	Ser	Cys	Gly	Leu	Pro
305					310					315					320
Arg	Glu	Λsp	Ala	Phe	His	lle	Phe	Arg	Asp	Pro	Leu	Thr	Ser	Asp	Leu
				325					330					335	

Pro	Trp	Pro	Gly	Val	Leu	Phe	Gly	Met	Ser	Ile	Pro	Ser	Leu	Trp	Tyr
			340					345					350		
Trp	Cys	Thr	Asp	Gln	Val	He	Val	Gln	Arg	Thr	Leu	Ala	Ala	Lys	Asn
		355					360					365			
Leu	Ser	His	Ala	Lys	Gly	Gly	Ala	Leu	Met	Ala	Ala	Tyr	Leu	Lys	Val
	370					375					380				
Leu	Pro	Leu	Phe	lle	Met	Val	Phe	Pro	Gly	Met	Val	Ser	Arg	He	Leu
385					390					395					400
Phe	Pro	Asp	Gln	Val	Ala	Cys	Ala	Asp	Pro	Glu	Ile	Cys	Gln	Lys	Ile
				405					410					415	
Cys	Ser	Asn	Pro	Ser	Gly	Cys	Ser	Asp	lle	Ala	Tyr	Pro	Lys	Leu	Val
			420					425					430		
Leu	Glu	Leu	Leu	Pro	Thr	Gly	Leu	Arg	Gly	Leu	Met	Met	Ala	Val	Met
		435					440					445			
Val	Ala	Ala	Leu	Met	Ser	Ser	Leu	Thr	Ser	Ile	Phe	Asn	Ser	Ala	Ser
	450					455					460				
Thr	Ile	Phe	Thr	Met	Asp	Leu	Trp	Asn	His	Leu	Arg	Pro	Arg	Ala	Ser
465					470					475					480
Glu	Lys	Glu	Leu	Met	Ile	Val	Gly	Arg	Val	Phe	Val	Leu	Leu	Leu	Val
				485					490					495	
Leu	Val	Ser	lle	Leu	Trp	lle	Pro	Val	Val	Gln	Ala	Ser	Gln	Gly	Gly
			500					505					510		
Gln	Leu	Phe	11e	Tyr	lle	Gln	Ser	He	Ser	Ser	Tyr	Leu	Gln	Pro	Pro
		515					520					525			
Val	Ala	Val	Val	Phe	He	Met	Gly	Cys	Phe	Trp	Lys	Arg	Thr	Asn	Glu
	530					535					540				
Lys	Gly	Ala	Phe	Trp	Gly	Leu]]e	Ser	Gly	Leu	Leu	Leu	Gly	Leu	Val
545					550					555					560
Arg	Leu	Val	Leu	Asp	Phe	He	Tyr	Val	Gln	Pro	Arg	Cys	Asp	Gln	Pro
				565					570					575	
Asp	Glu	Arg	Pro	Val	Leu	Val	Lys	Ser	lle	His	Tyr	Leu	Tyr	Phe	Ser
			580					585					590		
Met	lle	Leu	Ser	Thr	Val	Thr	Leu	He	Thr	Val	Ser	Thr	Val	Ser	Trp
		595					600					605			
Phe	Thr	Glu	Pro	Pro	Pro	Lys	Glu	Met	Val	Ser	His	Leu	Thr	Trp	Phe
	610					615					620				

Thr Arg His Asp Pro Val Val Gln Lys Glu Gln Ala Pro Pro Ala Ala Pro Leu Ser Leu Thr Leu Ser Gln Asn Gly Met Pro Glu Ala Ser Ser Ser Ser Val Gln Phe Glu Met Val Gln Glu Asn Thr Ser Lys Thr His Ser Cys Asp Met Thr Pro Lys Gln Ser Lys Val Val Lys Ala Ile Leu Trp Leu Cys Gly 11e Gln Glu Lys Gly Lys Glu Glu Leu Pro Ala Arg Ala Glu Ala Ile Ile Val Ser Leu Glu Glu Asn Pro Leu Val Lys Thr Leu Leu Asp Val Asn Leu lle Phe Cys Val Ser Cys Ala lle Phe Ile Trp Gly Tyr Phe Ala

<210> 3121

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3121

Met Met Phe Arg Ser Asp Arg Met Trp Ser Cys His Trp Lys Trp Lys Pro Ser Pro Leu Leu Phe Leu Phe Ala Leu Tyr Ile Met Cys Val Pro His Ser Val Trp Gly Cys Ala Asn Cys Arg Val Val Leu Ser Asn Pro Ser Gly Thr Phe Thr Ser Pro Cys Tyr Pro Asn Asp Tyr Pro Asn Ser Gln Ala Cys Met Trp Thr Leu Arg Ala Pro Thr Gly Tyr lle lle Gln Ile Thr Phe Asn Asp Phe Asp Ile Glu Glu Ala Pro Asn Cys Ile Tyr

нS	p	Ser	Leu		Leu	Asp	Asn	Gly		Ser	GIn	Thr	Lys		Cys	G1 y
				100					105					110		
A1	а	Thr		Lys	Gly	Leu	Ser		Asn	Ser	Ser	Ala		Glu	Met	His
			115					120					125			
Va	1	Ser	Phe	Ser	Ser	Asp	Phe	Ser	He	Gln	Lys	Lys	Gly	Phe	Asn	Ala
		130					135					140				
Se	r	Tyr	Пe	Arg	Val	Ala	Va]	Ser	Leu	Arg	Asn	Gln	Lys	Val	He	Leu
14	5					150					155					160
Pr	о.	Gln	Thr	Ser	Asp	Ala	Tyr	Gln	Val	Ser	Val	Ala	Lys	Ser	He	Ser
					165					170					175	
11	e	Pro	Glu	Leu	Ser	Ala	Phe	Thr	Leu	Cys	Phe	Glu	Ala	Thr	Lys	Val
				180					185					190		
Gl	у	His	Glu	Asp	Ser	Asp	Trp	Thr	Ala	Phe	Ser	Tyr	Ser	Asn	Ala	Ser
			195					200					205			
Ph	e	Thr	Gln	Leu	Leu	Ser	Phe	Gly	Lys	Ala	Lys	Ser	G1 y	Tyr	Phe	Leu
		210					215					220				
Se	er	He	Ser	Asp	Ser	Gln	Cys	Leu	Leu	Asn	Asn	Ala	Leu	Pro	Val	Lys
22	25					230					235					240
Gl	u	Lys	Glu	Asp	11e	Phe	Ala	Glu	Ser	Phe	Glu	Gln	Leu	Cys	Leu	Val
					245					250					255	
Tr	·p	Asn	Asn	Ser		Gly	Ser	He	G1 y		Asn	Phe	Lys	Arg		Tyr
Tr	·p	Asn	Asn	Ser 260		Gly	Ser	He	Gly 265		Asn	Phe	Lys	Arg 270		Tyr
				260	Leu				265	Val					Asn	
				260	Leu				265	Val				270	Asn	
G1	u	Thr	Val 275	260 Pro	Leu Cys	Лsp	Ser	Thr 280	265 11e	Val Ser	Lys	Val	11e 285	270	Asn Gly	Asn
G1	u	Thr	Val 275	260 Pro	Leu Cys	Лsp	Ser	Thr 280	265 11e	Val Ser	Lys	Val	11e 285	270 Pro	Asn Gly	Asn
G1 G1	u y	Thr Lys 290	Va] 275 Leu	260 Pro Leu	Leu Cys Leu	Asp Gly	Ser Ser 295	Thr 280 Asn	265 11e Gln	Val Ser Asn	Lys Glu	Val 11e 300	11e 285 Val	270 Pro	Asn Gly Leu	Asn Lys
G1 G1	u y	Thr Lys 290	Va] 275 Leu	260 Pro Leu	Leu Cys Leu	Asp Gly	Ser Ser 295	Thr 280 Asn	265 11e Gln	Val Ser Asn	Lys Glu	Val 11e 300	11e 285 Val	270 Pro Ser	Asn Gly Leu	Asn Lys
G1 G1 30	u y y	Thr Lys 290 Asp	Val 275 Leu 11e	260 Pro Leu Tyr	Leu Cys Leu Asn	Asp Gly Phe 310	Ser Ser 295 Arg	Thr 280 Asn Leu	265 11e Gln Trp	Val Ser Asn Asn	Lys Glu Phe 315	Val Ile 300 Thr	lle 285 Val Met	270 Pro Ser	Asn Gly Leu Ala	Asn Lys Lys 320
G1 G1 30	u y y	Thr Lys 290 Asp	Val 275 Leu 11e	260 Pro Leu Tyr	Leu Cys Leu Asn	Asp Gly Phe 310	Ser Ser 295 Arg	Thr 280 Asn Leu	265 11e Gln Trp	Val Ser Asn Asn	Lys Glu Phe 315	Val Ile 300 Thr	lle 285 Val Met	270 Pro Ser Asn	Asn Gly Leu Ala	Asn Lys Lys 320
G1 G1 30	и у у 95 е	Thr Lys 290 Asp Leu	Val 275 Leu Ile Ser	260 Pro Leu Tyr Asn	Leu Cys Leu Asn Leu 325	Asp Gly Phe 310 Ser	Ser Ser 295 Arg Cys	Thr 280 Asn Leu Asn	265 11e Gln Trp Val	Val Ser Asn Asn Lys 330	Lys Glu Phe 315 Gly	Val Ile 300 Thr	lle 285 Val Met	270 Pro Ser Asn	Asn Gly Leu Ala Asp 335	Asn Lys Lys 320 Trp
G1 G1 30	и у у 95 е	Thr Lys 290 Asp Leu	Val 275 Leu Ile Ser	260 Pro Leu Tyr Asn	Leu Cys Leu Asn Leu 325	Asp Gly Phe 310 Ser	Ser Ser 295 Arg Cys	Thr 280 Asn Leu Asn	265 11e Gln Trp Val	Val Ser Asn Asn Lys 330	Lys Glu Phe 315 Gly	Val Ile 300 Thr	lle 285 Val Met	270 Pro Ser Asn Val	Asn Gly Leu Ala Asp 335	Asn Lys Lys 320 Trp
G1 G1 30 11	u y y)5 e	Thr Lys 290 Asp Leu Asn	Val 275 Leu 11e Ser	260 Pro Leu Tyr Asn Phe 340	Leu Cys Leu Asn Leu 325 Trp	Asp Gly Phe 310 Ser Asn	Ser Ser 295 Arg Cys	Thr 280 Asn Leu Asn	265 11e Gln Trp Val Asn 345	Val Ser Asn Asn Lys 330 Leu	Lys Glu Phe 315 Gly	Val Ile 300 Thr Asn	lle 285 Val Met Val	270 Pro Ser Asn Val	Asn Gly Leu Ala Asp 335 Glu	Asn Lys Lys 320 Trp

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<210> 3122
<211> 195
<212> PRT
<213> Homo sapiens
<400> 3122
Met Ile Leu Ala Tyr Cys Asn Leu His Leu Ser Ser Ser Ser Asn Ser
1
                  5
                                     10
                                                          15
Pro Ala Ser Ala Ser Gln Ile Ala Met Ile Thr Gly Ala His His
                                 25
Ala Trp Leu Ile Phe Val Phe Leu Val Gly Met Gly Phe His His Val
                             40
Gly Gln Thr Gly Leu Glu Leu Leu Thr Ser Gly His Leu Pro Ala Ser
                         55
                                             60
Ala Ser Gln Gly Ala Gly Ile Thr Gly Val Thr Ser Ile Leu Gly Leu
                     70
                                         75
Phe Ile Tyr Leu Phe Phe Glu Met Glu Ser Cys Ser Val Ala Leu Ala
                 85
                                     90
Gly Val Gln Trp His Gly Leu Gly Ser Leu Gln Pro Gln Pro Pro Gly
            100
                                105
Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser Gly Ser Trp Asp Tyr Arg
                           120
Arg Val Pro Pro His Pro Ala Ser Leu Pro Ile Phe Leu Met Pro Lys
    130
                        135
                                             140
Arg Thr Tyr Tyr 11e Tyr Thr Leu Phe Cys Thr Leu Leu Pro Val Leu
                    150
                                        155
Asp Ser Leu Gly Thr 11e Pro Tyr Pro Leu Ser 11e Tyr Lys Glu Leu
                165
                                    170
                                                         175
Leu Phe His Cys Phe Pro Gln Arg Ser Ser 11e Pro Pro Asp Met Pro
            180
                                185
                                                     190
Lys Phe 11e
        195
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<210> 3123

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<211> 278
<212> PRT
<213> Homo sapiens
<400> 3123
Met Ser Gly Leu Thr Val Ser Gln Ser Gly Pro Ser Ser Gly Ser Gly
                                     10
Gly Gln Thr Ser Gly Leu Ala Val Ser Gln Ser Gly Pro Ser Ser Gly
             20
                                 25
Ser Gly Gly Gln Thr Ser Gly Leu Ala Val Ser Ala Glu Trp Pro Phe
Leu Arg Leu Trp Arg Thr Asp Val Arg Ala Arg Gly Val Thr Glu Trp
                         55
Pro Phe Leu Arg Leu Trp Arg Thr Asp Val Arg Ala Arg Gly Val Ser
                     70
                                          75
                                                              80
Arg Val Ala Leu Pro Pro Ala Leu Glu Asp Arg Ser Leu Gly Ser Arg
                                     90
Cys His Arg Val Ala Leu Pro Pro Ala Leu Glu Asp Arg Ser Leu Gly
            100
                                105
                                                     110
Ser Arg Cys Gln Gln Ser Gly Pro Ser Ser Gly Ser Gly Gln Thr
                            120
Ser Gly Leu Ala Val Ser Gln Ser Gly Pro Ser Ser Gly Ser Gly Arg
                        135
Gln Thr Ser Gly 11e Thr Val Ser Ala Glu Trp Pro Phe Leu Trp Leu
145
                    150
                                         155
                                                             160
Trp Arg Thr Asp Val Trp Asp His Gly Val Ser Arg Gly Ala Leu Pro
                165
                                    170
Leu Glu Pro Leu Val Gly Asn Leu Leu Val Ala Ser Phe Gly Phe Trp
            180
                                185
                                                     190
Trp Leu Val Phe Leu Phe Ser Phe Phe Ile Phe Phe Phe Phe Asn Leu
                            200
lle Arg Asp Arg Val Cys Leu Cys Ser Pro Gly Trp Ser Gln Thr Pro
                        215
                                             220
Gly Leu Lys Gln Ser Ser Cys Ser Val Leu Thr Lys Cys Cys Gly Tyr
225
                    230
                                         235
                                                             240
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Arg Arg Glu Ser Trp Gly Pro Ala Cys Trp Cys Phe Leu Thr Cys Gly

Pro Ile Thr Ala Val Ser Ala Phe Arg Val Thr Trp Pro Ser Pro Leu 260 265 270

Leu Glu His Pro Leu Leu 275

<210> 3124

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3124

Met Gly Asn Ser Leu Ser Ile Arg Pro Asp Ser Thr Met Gly Asn Ser

1 5 10 15

Thr Pro Val Pro Pro Asp Ser Ser Leu Gly Tyr Ile Ile His His Trp
20 25 30

Asn Gln Phe Asp Pro Asp Thr Leu Lys Gly Lys Cys Ile Ile Phe Phe 35 40 45

Cys Asn Thr Val Trp Pro His Tyr Glu Leu Pro Ser Pro Gln Gln Trp
50 55 60

Ala Val Ser Gly Ser Leu Asn Asp Asp Thr Ile Leu Gln Leu Asp Leu 65 70 75 80

Leu Cys Lys Arg Leu Gly Arg Trp Ser Glu Val Pro Tyr Val Gln Ala 85 90 95

Phe lle Lys lle Ser Lys Thr 100

<210> 3125

<211> 349

<212> PRT

<213> Homo sapiens

⟨400⟩ 3125

Met Ala Pro Arg Ser Leu Leu Leu Leu Ser Gly Ala Leu Ala Leu

1				5					10					15	
Thr	Asp	Thr	Trp	Ala	Gly	Ser	His	Ser	Leu	Arg	Tyr	Phe	Ser	Thr	Ala
			20					25					30		
Val	Ser	Arg	Pro	Gly	Arg	Gly	Glu	Pro	Arg	Tyr	He	Ala	Val	Glu	Tyr
		35					40					45			
Val	Asp	Asp	Thr	Gln	Phe	Leu	Arg	Phe	Asp	Ser	Asp	Ala	Ala	He	Pro
	50					55					60				
Arg	Met	Glu	Pro	Arg	Glu	Pro	Trp	Val	Glu	Gln	Glu	Gly	Pro	Gln	Tyr
65					70					75					80
Trp	Glu	Trp	Thr	Thr	Gly	Tyr	Ala	Lys	Ala	Asn	Ala	Gln	Thr	Asp	Arg
				85					90					95	
Val	Ala	Leu	Arg	Asn	Leu	Leu	Arg	Arg	Tyr	Leu	Glu	Asn	Gly	Lys	Glu
			100					105					110		
Thr	Leu		Arg	Ala	Asp	Pro	Pro	Lys	Ala	His	Val		His	His	Pro
		115					120					125			
He		Asp	His	Glu	Ala		Leu	Arg	Cys	Trp		Leu	Gly	Phe	Tyr
_	130					135		6.1			140				
	Ala	Glu	He	Thr		Thr	Trp	GIn	Arg		Gly	Glu	Glu	GIn	
145		T)	6.1	,	150	61	T)		Б	155	0.1		6.1	mi	160
GIn	Asp	lhr	GIu		Val	Glu	Thr	Arg		Ala	Gly	Asp	GIŅ		Phe
C1	1	т	41-	165	V = 1	V = 1	W = 1	D	170	C1	C1	C1	C1	175	т
GIN	Lys	rrp		мта	vai	vai	Va]		ser	GIŸ	Gju	61 ti		Arg	ГУJ
The	Cvc	Uic	180 Vol.	Cln	Uio	C1.	G1 y	185	Dro	Cln	Dro	Lan	190	Lan	Λ 22.2
1111	Cys	195	vai	OIII	111.5	01u	200	Leu	110	OIII	110	205	1.16	Leu	Λig
Trn	Glu		Ser	Pro	Gln	Pro	Thr	He	Pro	He	Val		11e	Val	Ala
пр	210	OIII	501	110	0111	215		110	,10	110	220	Ou y	110	,	7110
Glv		Val	Val	Leu	Glv		Val	Val	Thr	Glv		Val	Val	Ala	Ala
225					230					235					240
	Met	Trp	Arg	Lys		Ser	Ser	Asp	Arg		Arg	Glv	Ser	Tvr	
		·		245	•			·	250		· ·	•		255	
Gln	Ala	Ala	Ala	Tyr	Ser	Val	Val	Ser	Gly	Asn	Leu	Met	He	Thr	Trp
			260					265					270		
Trp	Ser	Ser	Leu	Phe	Leu	Leu	Gly	Val	Leu	Phe	Gln	Gly	Tyr	Leu	Gly
		275					280					285			
Cve	Lau	Ara	Sor	Hie	Sor	Val	Lau	Glv	Ara	Ara	Lve	Ala	Gln	Lau	Lau

<210> 3126

<211> 218

<212> PRT

<213> Homo sapiens

⟨400⟩ 3126

Met Ala Ala Leu Ile Ala Glu Asn Phe Arg Phe Leu Ser Leu Phe Phe 1 5 10 15

Lys Ser Lys Asp Val Met Ile Phe Asn Gly Leu Val Ala Leu Gly Thr
20 25 30

Val Gly Ser Gln Glu Leu Phe Ser Val Val Ala Phe His Cys Pro Cys 35 40 45

Ser Pro Ala Arg Asn Tyr Leu Tyr Gly Leu Ala Ala Ile Gly Val Pro 50 55 60

Ala Leu Val Leu Phe lle lle Gly Ile lle Leu Asn Asn His Thr Trp 65 70 75 80

Asn Leu Val Ala Glu Cys Gln His Arg Arg Thr Lys Asn Cys Ser Ala 85 90 95

Ala Pro Thr Phe Leu Leu Ser Ser Ile Leu Gly Arg Ala Ala Val 100 105 110

Ala Pro Val Thr Trp Ser Val IIe Ser Leu Leu Arg Gly Glu Ala Tyr 115 120 125

Val Cys Ala Leu Ser Glu Phe Val Asp Pro Ser Ser Leu Thr Ala Arg 130 135 140

Glu Glu His Phe Pro Ser Ala His Ala Thr Glu 11e Leu Ala Arg Phe 145 150 155 160

Pro Cys Lys Glu Asn Pro Asp Asn Leu Ser Asp Phe Arg Glu Glu Val

Ser Arg Arg Leu Arg Tyr Glu Ser Gln Val Arg Ser Cys Ala Lys Gly Ser Ser Ser Leu Val Val Ala Gly Glu Arg Ser Gly Asp Gly Leu Val Leu Lys Leu Gly Leu Val Leu Arg Gly <210> 3127 <211> 468 <212> PRT <213> Homo sapiens <400> 3127 Met Ala His Ser Val Pro Ser Asp Ser Arg Thr Ser Arg Arg Pro Thr Thr Arg Pro His Ala Ala Arg Gly Ala Pro Arg Gly Ser Arg Arg Pro Gly Arg Thr Pro Lys Trp Arg Leu Pro Arg Ile Ser Ala Arg Ala Pro Tyr Arg Leu Arg Arg Leu Arg Arg His Thr Tyr Trp Pro Pro Arg Arg Pro Val Ala Ala Ser Arg Cys Trp Pro Val Gly Ala Thr Pro Leu Gly Ser Val Gly Gly Arg Thr Gly Lys Met Asp Ala Ala Thr Leu Thr Tyr Asp Thr Leu Arg Phe Ala Glu Phe Glu Asp Phe Pro Glu Thr Ser Glu Pro Val Trp Ile Leu Gly Arg Lys Tyr Ser lle Phe Thr Glu Lys Asp Glu Ile Leu Ser Asp Val Ala Ser Arg Leu Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr Gly Pro Thr Ser Asp Thr Gly Trp

Gly Cys Met Leu Arg Cys Gly Gln Met Ile Phe Ala Gln Ala Leu Val

				165					170					175	
Cys	Arg	His	Leu	Gly	Arg	Asp	Trp	Arg	Trp	Thr	Gln	Arg	Lys	Arg	Gln
			180					185					190		
Pro	Asp	Ser	Tyr	Phe	Ser	Val	Leu	Asn	Ala	Phe	He	Asp	Arg	Lys	Λsp
		195					200					205			
Ser	Tyr	Tyr	Ser	He	His	Gln	He	Ala	Gln	Met	Gly	Val	Gly	Glu	Gly
	210					215					220				
Lys	Ser	He	Gly	Gln	Trp	Tyr	Gly	Pro	Asn	Thr	Val	Ala	Gln	Val	Leu
225					230					235					240
Lys	Lys	Leu	Ala	Val	Phe	Asp	Thr	Trp	Ser	Ser	Leu	Ala	Val	His	He
				245					250					255	
Ala	Met	Asp	Asn	Thr	Val	Val	Met	Glu	Glu	He	Arg	Arg	Leu	Cys	Arg
			260					265					270		
Thr	Ser	Val	Pro	Cys	Ala	Gly	Ala	Thr	Ala	Phe	Pro		Asp	Ser	Asp
		275					280					285			
Arg		Cys	Asn	Gly	Phe	Pro	Ala	Gly	Ala	Glu		Thr	Asn	Arg	Pro
	290			_		295				_	300	_	_		_
	Pro	Trp	Arg	Pro		Val	Leu	Leu	He		Leu	Arg	Leu	Gly	
305					310	_		2.1	m.	315				*21	320
Thr	Asp	He	Asn		Ala	Tyr	Val	Glu		Leu	Lys	His	Cys		Met
	D	C1	C	325	61	v 1	7.1	61	330		D		C	335	11.
Met	Pro	61n		Leu	61 y	Va]	11e		ыу	Lys	Pro	Asn		Ala	HIS
Т	Dha	110	340	Т	Vol	C1	C1	345	Lau	Ha	Turn	Lau	350	Dno	ша
I y I	rne	355	СТУ	1 y 1	vai	Gly	360	Glu	Leu	116	1 y 1	365	Asp	110	1115
Thr	Thr		Pro	Ala	Val	Glu		Thr	Acn	Gly	Cvs		110	Pro	Acn
1111	370	OIII	110	Mia	101	375		1111	пър	ory	380		110	110	лэр
Glu		Phe	His	Cvs	Gln	His		Pro	Cvs	Arg			He	Ala	Glu
385				0,0	390				0,0	395		00.			400
	Asp	Pro	Ser	lle		Val	Glv	Phe	Phe		Lvs	Thr	Glu	Asp	
				405					410	- , -			-	415	
Phe	Asn	Asp	Trp		Gln	Gln	Val	Lys		Leu	Ser	Leu	Leu		Gly
			420	•				425					430		,
Ala	Leu	Pro		Phe	Glu	Leu	Val		Leu	Gln	Pro	Ser		Leu	Ala
		435					440					445			
Cvs	Pro		Val	Len	Asn	Leu		Leu	Glv	Glu	Ser	Cvs	Gln	Val	Gln

Ile Leu Leu Met <210> 3128 <211> 622 <212> PRT <213> Homo sapiens <400> 3128 Met Ala Thr Val Leu Ser Arg Ala Leu Lys Leu Pro Gly Lys Lys Ser Pro Asp Leu Gly Glu Tyr Asp Pro Leu Thr Gln Ala Asp Ser Asp Glu Ser Glu Asp Asp Leu Val Leu Asn Leu Gln Lys Asn Gly Gly Val Lys Asn Gly Lys Ser Pro Leu Gly Glu Ala Pro Lys Pro Asp Ser Asp Ala Glu Val Ala Glu Ala Ala Lys Pro His Leu Ser Glu Val Thr Thr Glu Gly Tyr Pro Ser Glu Pro Leu Gly Gly Leu Glu Gln Lys Ala Ala Ser Ser Leu Val Ser Tyr Val Arg Thr Ser Val Phe Leu Leu Thr Leu Gly Ile Ser Met 11e Leu Val Leu Leu Cys Ala Phe Leu 11e Pro Cys Pro Pro Arg Asp Leu His Ser Thr Trp Ser Arg His Leu Gly Ser Gln Gly Gly Gly Asp Leu Ser Pro Leu Glu Leu Ala Asp Val Asn Gly Asp Gly Leu Arg Asp Val Leu Leu Ser Phe Val Met Ser Arg Asn Gly Ser Ala Val Gly Val Ser Arg Pro Ala Ala Asn Leu Val Cys Pro Ser Gly Met

Asn Gly Ser Thr Leu Trp Ser Ser Leu Leu Pro Glu Glu Ala Arg Asp

		195					200					205			
Пе	Thr	Cys	Leu	Glu	Leu	Met	Pro	Gly	Ser	Leu	Ala	Glu	Thr	Ile	Cys
	210					215					220				
Leu	Val	Thr	Gly	Thr	His	Lys	Met	Leu	Ser	Ala	Phe	Asn	Ala	Thr	Ser
225					230					235					240
Gly	Lys	Ala	lle	Trp	Thr	Leu	Asn	Pro	Asn	Tyr	Leu	Ser	Asn	Gly	Thr
				245					250					255	
Leu	Ala	Ala	Pro	Val	Val	Val	Leu	Pro	Asp	Leu	Asp	Glu	Asp	Gly	Val
			260					265					270		
Arg	Asp	Leu	Val	Val	Leu	Ala	He	Gly	Glu	Leu	Gln	Pro	Asp	Leu	Cys
		275					280					285			
Phe	Leu	Leu	Val	Ser	Gly	Arg	Thr	G1 y	Asn	Pro	Val	Gİy	Arg	Pro	Val
	290					295					300				
Lys	Tyr	Asn	He	Val	Gly	Val	Gly	Asn	Leu	He	Gly	Pro	Gln	Val	Tyr
305					310					315					320
He	Thr	Thr	Asn	Gly	Ala	Val	Tyr	Ile	Leu	Phe	Gly	Phe	Gly	Asn	He
				325					330					335	
Gln	Ala	Val	Ala	Leu	Arg	Asp	Ile	Phe	Val	Gln	Ala	Gln	Asn	Arg	Asp
			340					345					350		
Ser	Ser	Pro	Pro	Ser	Leu	Gln	lle	Glu	Glu	Pro	Glu	Trp	Glu	Lys	Arg
		355					360					365			
Arg	Ser	lle	Asn	Leu	Ser	Glu	Leu	lle	Asp	Val	Tyr	Ser	Asp	Gly	Val
	370					375					380				
Glu	Leu	Leu	Gln	Met	Val	Lys	Ala	Pro	Asp	Ser	Asn	Cys	Ser	Asn	Leu
385					390					395					400
Leu	He	Thr	Thr	Arg	Gln	Ser	Leu	Val	Leu	Leu	Arg	Gly	Gln	Asn	Leu
				405					410					415	
Thr	Pro	Tyr	Trp	Ala	Leu	Arg	Leu	Gln	Gly	Leu	Arg	Ser	Gln	Pro	Thr
			420					425					430		
Pro	Gly	Tyr	Phe	Thr	Asp	Asp	Gln	Thr	Leu	Asp	Phe	Leu	Leu	Gln	He
		435					440					445			
Gln	Asp	Gly	Va]	Gly	Met	Lys	Lys	Met	Met	Val	Val	Asp	Gly	Asp	Ser
	450					455					460				
Gly	Ser	He	Val	Trp	Ser	Tyr	Arg	Ala	Pro	Cys	His	Met	Lys	Glu	Thr
465					470					475					480
15	110	Thr	Sor	Ala	Val	Thr	Sor	Acn	Gln	Lve	Ser	Va1	Phe	leu	Phe

				485					490					495	
Trp	Ala	Glu	Gly	Leu	Ser	Ala	Ala	Ser	Pro	Asn	Ser	Asp	11e	He	Leu
			500					505					510		
Gly	Thr	Glu	Pro	Pro	Ser	Leu	His	His	Leu	Tyr	Leu	Leu	His	Pro	Ala
		515					520					525			
Phe	Pro	Ser	11e	Leu	Leu	Asp	Leu	Ala	Asn	Thr	Thr	Gly	Thr	Val	Thr
	530					535					540				
Ala	Ser	Glu	Val	Gly	Ile	Asn	Asp	Leu	Trp	Lys	Asp	Ala	Phe	Tyr	Val
545					550					555					560
Thr	Arg	Thr	Thr	Gly	Pro	Ser	Ser	Glu	Gly	His	Pro	Ala	Ala	Leu	Val
				565					570					575	
Val	Ser	Lys	Leu	Ser	Leu	Arg	Trp	Ala	Leu	Met	Glu	Gly	Gln	Met	Ala
			580					585					590		
Gln	Leu	Gln	Glu	Ser	Thr	Pro	Lys	He	Gly	Arg	Gly	Glu	Leu	Arg	Arg
		595					600					605			
Phe	Leu	Ser	Arg	He	Lys	Phe	Val	Glu	Ala	Pro	Tyr	Glu	lle		
	610					615					620				

<210> 3129

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3129

Met Val Arg Trp Val Pro Thr Arg Arg Val Val Val Ile Cys Asp Gly
1 5 10 15

Thr Cys Ser His Thr Leu Leu Cys Thr Pro Pro Gly Ser Pro Lys Ser 20 25 30

Pro His Ala Gly Ser Pro His Pro Ser Cys Ser Arg Lys His Val Arg
35 40 45

Lys Gln Ser Arg Arg Leu Leu Arg Gly Arg His Glu Ser Thr Leu Val $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60$

Leu Lys Pro Phe Pro Asn Val Leu Val Asp Cys Val Val Leu Pro Lys
65 70 75 80

Leu Pro Ala Ala Gly Ala Arg Glu Val Thr Pro Ala Gly Ala Ala Ala

Gly Gly Ser Pro Arg Trp Leu Ala Leu Phe Leu Phe Cys Phe Phe Phe $100 \ \ \, 105 \ \ \, 110 \ \ \, 110$

<210> 3130

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3130

Met Ala Ile Lys Glu Ile Ser Asp Ala Leu Ile Asn Met Phe Val His 1 5 10 15

Ser Ala Asp Phe Thr Gly Thr Ser Cys Met Ser Asp Pro Leu Ser Gly
20 25 30

Trp Trp Gly Val Glu Asp Glu Phe Ser Leu Asn Glu 11e Cys Cys Leu 35 40 45

Cys Gly Pro Asp Ser Pro Arg Lys Arg His Thr Arg Thr Val Pro Asp 50 55 60

Pro Glu Glu Glu Arg Ala Leu Gln Ser Arg Ala Arg Gln Pro Gly His
65 70 75 80

Val Glu Arg Arg Gly Leu His Trp Glu Gly Leu Arg Thr Phe His Arg

85 90 95

Val Cys Arg Ala Ala Tyr Leu Pro Gly Gly Ser Val Leu Ala Gly Arg 100 105 110

Gly Met Arg Glu Pro Cys Thr Pro Ala Arg Ala Phe Gly Arg Ser Ser 115 120 125

Thr Gln Val Arg Lys Ser Pro Val Pro Leu Ser Val 130 135 140

<210> 3131

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3131 Met Trp Asp Pro Leu Ser Asp Gln Ala Ser Ser Leu Asn Val Arg Ser 1 5 10 15 Ala Gly Gln Gly Pro Gly Ile Trp Glu Leu Pro Gly Ser Gly Leu Gly 20 25 Cys Leu Arg Asp Pro Arg Ile Ser Ser Val Leu Cys Gly Leu Ala Glu 40 Gly Ser Gln Ala Lys Ser Ser Gly Ser Ala Val Thr Ala Gly Ala Leu 50 55 Gly Ser Gln Ala Thr Gly Asn Asn Ser Gly Leu Phe Lys Gln Lys Arg 70 75 Thr Leu Ser Lys Gly Ser Trp Gly Thr His Lys Ile Thr Lys Arg Ala 90

Glu Glu Tyr Ser Trp 100

<210> 3132

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3132

 Met His Ala Arg
 Tyr Ile Gly
 Thr Thr Val Phe Val Arg
 Arg Gln Val Gly

 1
 5
 10
 10
 15

 Arg Tyr Leu Thr Leu Ala Ile Arg
 Met Pro Glu Asp Leu Ala Met Ser
 20
 25
 25
 30

 Tyr Glu Glu Glu Ser Gln Asp Leu Gln Leu Cys Val Asn Gly Cys Pro Leu 35
 40
 45

 Ser Glu Arg Ile Asp Asp Gly Gln Gly Gln Val Ser Ala Ile Leu Gly 50
 55
 60

 His Ser Leu Pro Arg Thr Ser Leu Val Gln Ala Trp Pro Gly Tyr Thr 65
 70
 75

Leu Glu Thr Ala Asn Thr Gln Cys His Glu Lys Met Pro Val Lys Asp

\$85\$ 90\$ 95 lle Tyr Phe Gln Ser Cys Val Phe Asp Leu Leu Thr Thr Gly Asp Ala

Asn Phe Thr Ala Ala Ala His Ser Ala Leu Glu Asp Val Glu Ala Leu His Pro Arg Lys Glu Arg Trp His Ile Phe Pro Ser Ser Gly Asn Gly Thr Pro Arg Gly Gly Ser Asp Leu Ser Val Ser Leu Gly Leu Thr Cys Leu Ile Leu Ile Val Phe Leu <210> 3133 <211> 156 <212> PRT <213> Homo sapiens <400> 3133 Met Glu Gly Val Val Gly Pro Gln Ala Ala Thr Cys Arg Leu Ala Ala His Cys Ile Met Leu Val Ser Pro Cys Ser Glu Arg Ala Pro Pro Leu Leu Gly 11e Leu Thr His Pro Met His Met Ala Ala Leu Leu Ala Gly Glu Pro Arg Arg Pro Gly Ser Pro Gln Val Pro 11e Cys Ser Ser Phe Thr His Trp lle Leu Ala Arg Gly Gly Ser Arg Cys Asp Thr Val Tyr Ala Thr Phe Gly Ile Gly Leu Ile Leu Tyr Asp Thr Asn Thr Val Met Ala Ser Ser Gln Leu Leu Thr Ala Ser Gln Leu Leu Ser Val Tyr Tyr Pro lle Asn Ser Pro Ala Thr Leu Arg Ala Gly lle Val Thr Ser Ala Leu Thr Gly Glu Glu Thr Glu Ala Gln Arg Gly Leu Ala Asp Leu Ser

Glu Ala Thr Gln Pro Val Ser Ser Arg Val Gly 11e

145 150 155

<210> 3134

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3134

Met Ser Thr Ala Thr Arg Arg Val Cys Gly Lys Val Glu Gly Glu Pro

1 5 10 15

Glu Thr Pro Trp Ser Leu Leu Ser Leu Ala Gly Ser Phe Leu Pro Ala 20 25 30

Arg Ser Pro Gln Gly Thr Leu Glu Glu Glu Leu Ser Trp Ser Cys Arg
35 40 45

Gly Pro Gly Thr Gly Arg Ser Gly Gly Gly Pro Gln Gln Pro Arg lle
50 55 60

Pro Glu Pro Ala Ala Arg Pro Gly Arg Ser Cys Ala Leu Pro Pro Pro 65 70 75 80

Gly Ala Arg Arg Ser Arg Gly Thr Phe Gln Glu Leu Pro Arg Ala Glu
85 90 95

Val Pro Gly Leu Gly Val Ala Ser Ser Cys Gln Ile Pro Cys Ser Pro 100 105 110

Gly Asp Pro Glu Lys His Arg Ala He Pro Asp Pro Gly Thr Phe Arg 115 120 125

Arg Leu Ala Ala Ile Trp Glu 130 135

<210> 3135

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3135

Met Ser Asp His Ala Gly Met Pro Asp Leu Val Leu His Pro Trp Trp

5 10 Gln Val Ser Leu Ser Trp Gly Arg Gly Lys Tyr Pro Ser Thr Pro Ser 20 25 Pro Ser Pro Leu Val Ala Ser Pro Ala Phe Leu Gly Gly Lys Asn Pro 35 40 45 Pro Ile Ala Tyr Phe His Ala Pro Thr Ser Tyr Leu Cys Ala Pro Ile 55 60 Pro Tyr Phe His Ala Pro Ile Ser Tyr Leu Cys Thr Pro Ile Pro Tyr 65 70 75 80 Phe Arg Ala Pro Thr Leu Ser Leu Leu Phe Trp Arg Gly Arg Lys Pro 90 His Pro Phe Ser Met Ser Leu Leu Phe Ser Leu Gly Leu Pro Pro Ser 105 110 Leu Cys Phe His Leu Pro Phe Leu Leu Leu Pro 115 120

<210> 3136

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3136

Met Ser Ser Cys Pro Gly Cys Ala Leu Pro Lys Gly Met Cys Thr Ser

1 5 10 15

Lys Pro Leu Leu Ala Glu Leu Pro Gln Asp His Ala Ser Gly Pro Pro 20 25 30

Pro Ala Thr Pro Ala Cys Leu Glu Gln Pro Pro His Arg Arg Pro Arg 35 40 45

Leu Ser Gly Pro Ala Gly Gly Ser Ala Arg Pro Pro Pro Arg Trp Trp 50 55 60

Arg Arg Ser Pro Leu Ala Ser Gly Arg Cys Pro Arg Tyr Gly Pro Gly
65 70 75 80

Ser Thr Cys Ser Pro Ala His Pro Ser Leu Ala Arg His Leu Ala Glu 85 90 . 95

Gly Arg Gly Ala Asp Gly Trp Arg 11e Pro 11e Arg Thr Ala Ser His

100 105 110 Arg Gly Leu Ala Gly Cys Ala Pro Glu Arg 120 115 <210> 3137 <211> 499 <212> PRT <213> Homo sapiens <400> 3137 10

Met Glu Phe Gly Leu Thr Trp Val Phe Leu Val Ala Leu Leu Lys Gly Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Thr Val Val Gln

20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Thr Gly Phe Asp Met 40

Pro Ser Phe Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 50 55

Glu Trp Val Ser Leu 11e Ser Trp Asp Gly Gly Ser Tyr Tyr His Ala 65 70

Asp Ala Val Arg Gly Arg Phe Val Val Ser Arg Asp Asn Gly Arg His 90

Ser Leu Tyr Leu Gln Met Asn Asn Leu Arg Pro Glu Asp Thr Ala Leu 100 105 110

Tyr Tyr Cys Ala Lys Asp Pro Leu Arg Pro Asn Thr Tyr Tyr Asp 120

Ser Gly Asp Gly Ala Gly IIe Trp Gly Gln Gly Thr Met Val Thr Val 130 135

Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys 155

Ser Thr Gln Pro Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly

170 165

Phe Phe Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln 190 185 180

Gly Val Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp

		195					200					205			
Leu	Tyr	Thr	Thr	Ser	Ser	Gln	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys	Leu
	210					215					220				
Ala	Gly	Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro	Ser
225					230					235					240
Gln	Asp	Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Ser	Thr	Pro	Pro	Thr	Pro
				245					250					255	
Ser	Pro	Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser	Cys	Cys	His	Pro	Arg
			260					265					270		
Leu	Ser	Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu	Leu	Gly	Ser	Glu
		275					280					285			
Ala	Asn	Leu	Thr	Cys	Thr	Leu	Thr	G1 y	Leu	Arg	Asp	Ala	Ser	Gly	Val
	290					295					300				
Thr	Phe	Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala	Va]	Gln	Gly	Pro
305					310					315					320
Pro	Glu	Arg	Asp	Leu	Cys	Gly	Cys	Tyr	Ser	Val	Ser	Ser	Val	Leu	Pro
				325					330					335	
Gly	Cys	Ala		Pro	Trp	Asn	His		Lys	Thr	Phe	Thr		Thr	Ala
			340					345					350		
Ala	Tyr		Glu	Ser	Lys	Thr		Leu	Thr	Ala	Thr		Ser	Lys	Ser
		355	ъ.		***		360					365		~	0.1
Gly		Thr	Phe	Arg	Pro		Val	His	Leu	Leu		Pro	Pro	Ser	Glu
C1	370			,	61	375	A7 T	TI	,	Ti	380	,	4.1	Δ	CI.
	Leu	Ala	Leu	Asn		Leu	val	Inr	Leu		Cys	Leu	Ala	Arg	
385	Can	Dno	Lua	Aan	390	Lou	Vol	A 20 cr	Tun	395	C1n	Clu	Car	Cl _n	400
rne	261	FIO	LyS	405	vai	Leu	vai	AI g		Leu		GIŅ	Ser	61n 415	Gru
Lon	Pro	Ara	Glu		Tyr	Lou	Thr	Trn				Gla	Clu	Pro	Sor
Leu	110	AI g	420	ryo	ı yı	Leu	1111	425	N1 G	Sei	m g	0.111	430	110	361
Gln	Glv	Thr		Thr	Phe	Ala	Val		Ser	11e	Len	Arø		Ala	Ala
0111	01.	435				.110	440		001		13.0.0	445			
Glu	Asp		Lvs	Lys	Glv	Asp		Phe	Ser	Cvs	Met		Glv	His	Glu
	450			,		455					460				
Ala		Pro	Leu	Ala	Phe		Gln	Lys	Thr	He		Arg	Leu	Ala	Gly
465					470			-		475	-	•			480
	Pro	Thr	His	Val		Va1	Ser	Val	Val	Met	Ala	Glu	Val	Asp	Glv

485 490 495

Thr Cys Tyr

<210> 3138
<211> 112
<212> PRT
<213> Homo sapiens
<400> 3138
Met Asn Leu Gly Gly Gly Ala Cys Ser Gln Pro Arg Ser Gly Cys Cys
1 5 10 15
Thr Pro Ala Trp Gly Thr Glu Arg Asp Ser Ala Ser Lys Lys Lys Lys

Arg Asp Leu Val Ser Lys Thr Ala Thr Thr Lys Asn Tyr Leu Gly 11e
100 105 110

<210> 3139

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3139

Met Gly Leu Gln Pro Leu Glu Phe Ser Asp Cys Tyr Leu Asp Ser Pro

1 5 10 15

Trp Phe Arg Glu Arg Ile Arg Ala His Glu Ala Glu Leu Glu Arg Thr

30 20 25 Asn Lys Phe Ile Lys Glu Leu Ile Lys Asp Gly Lys Asn Leu Ile Ala 40 45 Ala Thr Lys Ser Leu Ser Val Ala Gln Arg Lys Phe Ala His Ser Leu 55 60 50 Arg Asp Phe Lys Phe Glu Phe Ile Gly Asp Ala Val Thr Asp Asp Glu 70 75 Arg Cys Ile Asp Ala Ser Leu Arg Glu Phe Ser Asn Phe Leu Lys Asn 85 90 95 Leu Glu Glu Gln Arg Glu Ile Met Ala Leu Ser Val Thr Glu Thr Leu 100 105 Ile Lys Pro Leu Glu Lys Phe Arg Lys Glu Gln Leu Gly Ala Val Lys 115 120 Glu Glu Lys Lys Lys Phe Asp Lys Glu Thr Glu Lys Asn Tyr Ser Leu 130 135 140 Ile Asp Lys His Leu Asn Leu Ser Ala Lys Lys Lys Asp Ser His Leu 160 155 150 Gln Glu Val

<210> 3140

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3140

Met Glu Pro Pro Asn Cys Pro IIe IIe Tyr Val Ser Val Lys Leu Glu
1 5 10 15

Phe Ile Arg Leu Val Thr Asn Cys Arg Val Ala Leu Gly His Ser Gly
20 25 30

Phe Cys Ser Leu Lys IIe Tyr Leu Val Ala Ser Gln Ser Thr Leu Val
35 40 45

Thr Gln His Gln Ser Ala Pro Asp Gly Arg Ser Ser Asp Val Lys 11e 50 55 60

Gln Val Thr Ala Gln Val Asp Val Leu Leu Leu Val Pro Gly Val Asp

Phe Ser Ile Phe Pro Pro Val Leu Gly Asp Lys Gly Glu Leu Arg Val Ser Phe Ser Pro Leu Ala Arg <210> 3141 <211> 182 <212> PRT <213> Homo sapiens <400> 3141 Met Ser Leu Gln Phe Ser Gln Gly Leu Arg Ser Trp His Gly Glu Phe Val Pro Gly Cys Cys Val Pro Arg Gly Val Leu Gly Glu Gly Phe Arg Gly Ala Arg Gln Gly Val Leu Gly Ser Arg Val Pro Pro Gly Ser Val Trp Glu Pro Cys 11e Thr Arg Gly Arg Arg Val Ser Leu Pro Gly Ser Leu Leu Leu Cys lle Arg Thr Thr Pro Gly Arg Leu Trp Gly Pro Thr Leu His Pro Gln Gly Ser Met Arg Gln Gly Pro Arg Asn Ser Leu Arg Pro Pro Pro Ser Lys Pro Ala Leu Ser Pro 11e Pro Ala His Pro Glu Pro Ser Pro Ala Asn Leu Leu Leu Arg Ser Trp Gln Glu Ala Thr Val Leu Leu Pro Phe Pro Phe Arg Leu Leu Arg Val Thr Asp Pro Asn Arg Glu Ile Ser Ile Cys Leu Pro Ser Gly Cys Pro Ala Arg Arg Ala Leu His Gly Val Pro Pro Leu Cys Glu Met Gly Gln Asp Pro Ser Ala Arg

Gly Ala Trp Gly Trp Gly

80

95

180

<210> 3142 <211> 104 <212> PRT <213> Homo sapiens <400> 3142 Met Ala Ala Gly Asn His Ser Gly Gly Thr Cys Trp Pro Ala Leu His 1 5 10 Pro Val Pro Leu Trp Ala Pro Leu Pro Ser Asp Ser Gly His Pro Trp 25 Ala Pro Ser Leu Tyr Arg Pro Gly Gln Glu Glu Thr Thr Gly Asn His 35 45 Pro Lys Asp Asn Met Leu Val Gln Cys His Ser Ser Leu Ala Leu Trp 55 Val Pro Leu Trp Pro Val Pro Thr Gly Trp Leu Ile Leu Trp Phe Leu 70 65 75 Tyr His His Met Pro Ile Leu Arg His Ser Pro Ala Leu Ser Val Arg 85 90 Glu Cys Lys Phe Cys Asn Ile Phe

<210> 3143

<211> 138

<212> PRT

<213> Homo sapiens

100

<400> 3143

Met Thr Ala Arg His Pro Ala His Lys Gln Arg Gln Ser Arg Gly Phe

Ser Pro Leu Trp Arg Pro Arg Gln Ser Glu Arg Lys Gly Arg Gly Cys 20 25 30

Glu His Leu Arg Ile Tyr Ala Ala Gln Gly Ala Pro Glu Ser Cys Arg

		35					40					45			
Glu	Pro	Gly	Trp	Ala	Ser	Ala	Gly	Asn	Lys	Gly	Ser	Pro	Phe	Cys	G1 y
	50					55					60				
Thr	Gln	Ala	Leu	Ala	Asn	Leu	Lys	His	Asp	Ser	Pro	Lys	Ser	Ala	Gly
65					70					75					80
Ala	Val	Pro	Glu	Pro	Ser	Ala	Ala	Gln	Cys	Pro	Arg	Arg	Thr	Ser	Asp
				85					90					95	
His	Arg	Asp	Trp	Asp	Asn	Val	Lys	Ala	Gln	Pro	He	Gln	Ala	His	Arg
			100					105					110		
Pro	Ala	His	Val	Val	Leu	Gly	Pro	Ser	Ala	Cys	Ala	Leu	Gly	Lys	Trp
		115					120					125			
Leu	Pro	Trp	Asp	Cys	Ala	Arg	Ala	Ala	Ser						
	130					135									
<210)> 31	144													
<21	1> 10)4													
<212	2> PI	RT													
<213	3> Ho	omo įs	sapie	ens											
<400)> 31	144													
Met	Ala	Ala	C1												
1			GTy	Asn	His	Ser	Gly	Gly	Thr	Cys	Trp	Pro	Ala	Leu	His
			Gly	Asn 5	His	Ser	Gly	Gly	Thr 10	Cys	Trp	Pro	Ala	Leu 15	His
Pro	Va]			5		Ser Pro			10					15	
Pro	Val			5					10					15	
		Pro	Leu 20	5 Trp	Ala		Leu	Pro 25	10 Ser	Asp	Ser	Gly	His 30	15 Pro	Trp
		Pro	Leu 20	5 Trp	Ala	Pro	Leu	Pro 25 Gln	10 Ser	Asp	Ser	Gly	His 30	15 Pro	Trp
Ala	Pro	Pro Ser 35	Leu 20 Leu	5 Trp Tyr	Ala Arg	Pro	Leu Gly 40	Pro 25 Gln	10 Ser Glu	Asp Glu	Ser Thr	Gly Thr 45	His 30 Gly	15 Pro Asn	Trp
Ala	Pro	Pro Ser 35	Leu 20 Leu	5 Trp Tyr	Ala Arg	Pro Pro	Leu Gly 40	Pro 25 Gln	10 Ser Glu	Asp Glu	Ser Thr	Gly Thr 45	His 30 Gly	15 Pro Asn	Trp
Ala Pro	Pro Lys 50	Pro Ser 35 Asp	Leu 20 Leu Asn	5 Trp Tyr Met	Ala Arg Leu	Pro Pro Val	Leu Gly 40 Gln	Pro 25 Gln Cys	10 Ser Glu His	Asp Glu Ser	Ser Thr Ser 60	Gly Thr 45 Leu	His 30 Gly Ala	15 Pro Asn Leu	Trp His Trp
Ala Pro	Pro Lys 50	Pro Ser 35 Asp	Leu 20 Leu Asn	5 Trp Tyr Met	Ala Arg Leu	Pro Pro Val 55	Leu Gly 40 Gln	Pro 25 Gln Cys	10 Ser Glu His	Asp Glu Ser	Ser Thr Ser 60	Gly Thr 45 Leu	His 30 Gly Ala	15 Pro Asn Leu	Trp His Trp
Ala Pro Val 65	Pro Lys 50 Pro	Pro Ser 35 Asp Leu	Leu 20 Leu Asn Trp	5 Trp Tyr Met Pro	Ala Arg Leu Val 70	Pro Pro Val 55	Leu Gly 40 Gln Thr	Pro 25 Gln Cys	10 Ser Glu His	Asp Glu Ser Leu 75	Ser Thr Ser 60	Gly Thr 45 Leu Leu	His 30 Gly Ala Trp	15 Pro Asn Leu Phe	Trp His Trp Leu 80
Ala Pro Val 65	Pro Lys 50 Pro	Pro Ser 35 Asp Leu	Leu 20 Leu Asn Trp	5 Trp Tyr Met Pro	Ala Arg Leu Val 70	Pro Pro Val 55 Pro	Leu Gly 40 Gln Thr	Pro 25 Gln Cys	10 Ser Glu His	Asp Glu Ser Leu 75	Ser Thr Ser 60	Gly Thr 45 Leu Leu	His 30 Gly Ala Trp	15 Pro Asn Leu Phe	Trp His Trp Leu 80

<211> 122 <212> PRT <213> Homo sapiens <400> 3145 Met Gln Leu Arg Gln Gly Leu Lys Tyr Thr Leu Val Ser Cys Ser Thr 1 5 10 15 Leu Arg Leu Thr Arg Val Gly Lys Asn Leu Ala Leu Ala Asn Leu Trp 25 Ser Asp Trp Phe Ser Ala Leu Glu Pro Cys Val Leu Leu Phe Lys Met 40 Phe lle Lys Thr lle Arg Ala Leu Leu Asn lle Asp Pro Tyr Gln Glu 50 Phe Tyr Phe Cys Pro Cys Pro Val Ser Ser Glu Ala Cys Asp Leu Cys 70 75 Ser Ala Phe Cys Pro Leu Lys His Val Ile Phe Val Pro Thr Pro Arg 85 90 Ser Tyr Thr Pro Ser Pro Phe Ala 11e Leu Asn Lys Asn Leu Leu Val 105 100 110 Leu Arg Leu Gly Pro Ala Ser Arg Ser Tyr 115 120 <210> 3146 <211> 223 <212> PRT <213> Homo sapiens <400> 3146 Met Val Gln Arg Glu Ser Leu Ser Ser Glu Gly Ala Leu Gly Gly Lys 10 Glu Leu Gln Pro Arg Gly Trp Gly Thr His His Ser Arg Ile Pro Lys 20 30 25

Ser Cys Thr Pro Ala Gly Arg Ile Leu Val Pro Ser His Tyr His His

<210> 3145

40 35 45 Ser Pro Pro Val Pro Gln Glu Pro Pro Cys Arg Glu Gln Gln Glu Ser 50 55 60 Gly Ser Phe Arg Ala Cys Arg Gly Leu Gly Ser Leu Ala Ser Lys Pro 70 75 65 80 Leu Gly Pro Gly Val Ser Leu Thr Arg Asn Gly Thr Gly Val Glu Pro 90 Trp Gly Cys Gly Gln Ala Gly Leu Phe Pro Gly Pro Gly Asn Gly Ser 100 105 110 Gln Gly Trp Ser Leu Ala Gln Val Ser Cys Pro Trp Leu Arg Ser Leu 120 125 Ser Leu Pro Gly Leu Arg Ala His Leu Lys Ala Glu Ala Glu Leu Pro 135 Pro Lys Leu Pro Leu Gln Glu Glu Glu Pro Glu Asp Ser Gln Ser Glu 150 155 145 Pro Ser Pro Ser Ala Lys Gln His Lys Lys Ala Lys Lys Arg Lys Ser 170 165 Leu Gly Ala Pro Val Leu His Ala Val Ala Ser Met Val Ser Ala Pro 180 185 190 Leu Glu Thr Leu Arg Leu Glu Arg Glu Trp Gln Ser Leu Asp Cvs Ser 200 205 Phe Ser Pro Cys Leu Trp Gly Pro Thr Trp His Asn Leu Ala Leu 210 215

<210> 3147

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3147

Met Ala Arg Val Gln Ala Pro Arg Leu Ala Ser Ala Cys Leu Ala His 1 5 10 15 Ser Cys Pro Leu Ser Gly Gly Gly Cys Ser Glu Glu Ser Gly Cys Arg 20 25 30

Leu Thr Ser Pro Glu Lys Pro Glu Pro Lys Met Glu Ile Lys Phe Glu

35 40 45 Met Leu Asp Ala Ser Gly Asp Glu Ser Gly Gln Lys Ser Ser Lys Arg 55 Ala Arg Leu Gln Gly Ala Asn Gly Ala Pro Pro Gly Gly Ser Ala Pro 75 70 Ser Pro Pro Ala Ser Ser Ser Ser Ser Ser Ser Ser Trp Pro Gly 90 Ser Arg Leu Arg Cys Leu Ser Leu Gln Glu Val Gly Leu Val Pro Phe 100 105 110 Gly Tyr Leu His Ser Pro Ser Pro His Ser Pro Ser Trp His Phe Pro 115 120 125 Cys Cys Ser Phe Met Glu Cys Ala Ser Gly Ser Pro Thr Arg Leu Glu 135 140 Pro Leu Glu Cys lle Thr Arg Asp Leu Thr lle Cys Val Ser Leu Arg 145 150 155 160 Pro Ala Gln Pro Pro His Thr Gly Thr Cys Arg Glu Trp Met 165 170

<210> 3148

<211> 435

<212> PRT

<213> Homo sapiens

<400> 3148

Met Lys Trp Gly Trp Val Phe Leu Gly Ala Leu Leu Ser Leu Gly Asn

1 5 10 15

Met Ser Trp Gly Glu Lys Gly Leu Glu lle Pro Glu Tyr Asp Gly Lys

20 25 30

20 25 30

Asp Arg Val His Asp Leu Asn Ala Lys Asn Tyr Lys Ser Val Met Lys 35 40 45

Lys Tyr Asp Val Met Val Ile Tyr Tyr His Ala His Val Glu Ser Asn 50 55 60

Lys Asn Ala Gln Lys Ala Phe Glu Met Glu Glu Leu Ala Leu Glu Leu 65 70 75 80

Ala Ala Gln Val Leu Asp Asp Leu Asp Asp Glu Asp 11e Gly Phe Gly

				85					90					95	
Leu	Val	Asp	Glu	Lys	Lys	Asp	Leu	Ser	Val	Ala	Lys	Lys	Leu	Gly	Leu
			100					105					110		
Asp	Glu	Val	Glu	Ser	Пe	Tyr	Пе	Phe	Val	Asp	Asn	Glu	Пе	Пе	Glu
		115					120					125			
Tyr	Asp	Gly	Glu	Leu	Ala	Ala	Asp	Thr	Leu	Val	Glu	Phe	Leu	Tyr	Asp
	130					135					140				
Val	He	Glu	Asp	Pro	Val	Glu	He	He	Asp	Asn	Glu	Arg	Glu	Leu	Lys
145					150					155					160
Gly	Phe	His	Asn	He	Asp	Glu	Asp	He	Lys	Leu	Val	Gly	Tyr	Phe	Lys
				165					170					175	
Ser	Glu	Lys	Ser	Pro	His	Phe	lle	Glu	Tyr	Asp	Asp	Ala	Ala	Glu	Glu
			180					185					190		
Phe	His	Pro	Phe	He	Lys	Phe	Phe	Ala	Thr	Phe	Asp	Ala	Lys	He	Ala
		195					200					205			
Lys	Lys	Leu	Lys	Met	Lys	Leu	Asn	Glu	Val	Asp	Phe	Tyr	Glu	Pro	Phe
	210					215					220				
	Glu	Glu	Pro	Val		Ile	Pro	Gly	Gln		Tyr	Ser	Glu	Ala	
225					230					235					240
Leu	Val	Asp	Tyr		Glu	Glu	His	Asp		Pro	Thr	Leu	Arg		Leu
0.3				245		0.1	m1		250					255	0.1
Glu	Pro	His		Met	Tyr	Glu	Thr		Glu	Asp	Asp	He		Gly	Glu
11.	7.1	v 1	260	DI		6.1	63	265		р		61	270 T	<i>c</i> 1	DI
HIS	He		Ala	Phe	Ala	Glu		Asp	Asp	Pro	Asp		lyr	61u	Phe
1	C1	275	1	1	C1	V - 1	280	Α	C1	Λ	Tl	285	A	۸1	Λ
Leu	290	116	Leu	Lys	GIU	Val 295		Arg	GIU	Asn	300	ASP	ASN	Ala	Asp
Lon		Tlo	110	Tun	Ha	Asp		Acn	Acn	Dho		Lou	Lou	Val	Dro
305	361	116	116	пр	310	лър	110	игр	лър	315	110	Leu	Leu	vai	320
	Trn	Glu	Lve	Thr		Gly	ماا	Aen	Lou		Sor	Pro	Gln	116	
1 5 1	пр	Oju	Lys	325	THE	Oly	,110	пар	330	Oly	561	110	0111	335	Oly
Val	Val	Asn	Val		Asn	Ala	Asn	Ser		Trn	Met	Glu	Met		Asn
		пор	340	ora	пор	MIG	Пор	345	.01	пр	Me	010	350	пор	1100
Asp	Glu	Asn		Pro	Thr	Ala	Asp		Leu	Glu	Asp	Tro		G111	Asp
		355					360					365			r
Val	Leu	_	Glv	Lvs	He	Asn		Asn	Asn	Asn	Asp		Asp	Asp	Asn

Asp Asp Glu <210> 3149 <211> 135 <212> PRT <213> Homo sapiens <400> 3149 Met Gly Asn Tyr Leu Leu Arg Lys Leu Ser Cys Leu Gly Glu Asn Gln Lys Lys Pro Lys Lys Gly Asn Pro Asp Glu Glu Arg Lys Arg Gln Glu Met Thr Thr Phe Glu Arg Lys Leu Gln Asp Arg Asp Lys Lys Ser Gln Glu Val Ser Ser Thr Ser Asn Gln Glu Asn Glu Asn Gly Ser Gly Ser Glu Glu Val Cys Tyr Thr Val 11e Asn His 11e Pro His Gln Arg Ser Ser Leu Ser Ser Asn Asp Asp Gly Tyr Glu Asn Ile Asp Ser Leu Thr Arg Lys Val Arg Gln Phe Arg Glu Arg Ser Glu Thr Glu Tyr Ala Leu Leu Arg Thr Ser Val Ser Arg Pro Cys Ser Cys Thr His Glu His Asp Tyr Glu Val Val Phe Pro His

<210> 3150 <211> 122 <212> PRT <213> Homo sapiens <400> 3150 Met Ala Ser Val Lys Asn Arg Arg Val Val Ala Asp Asn Gly Cys Leu 1 5 10 15 Pro Gln Thr His Pro Gln Gln Leu Cys Arg His Ser Ser Thr Trp Pro 25 Leu Ala Leu Gly Met Gln Leu Leu Ser Ser Glu Ser Ile Arg Phe Ile 40 45 Phe Phe Phe Leu Arg Gln Ser Leu Val Leu Ser Pro Arg Leu Glu Cys 50 55 60 Ser Gly Val Met Leu Ala His Cys Asn Leu Cys Leu Pro Gly Ser Ser 70 75 Asp Ser Pro Thr Ser Ala Ser Arg Val Ala Trp Thr Thr Gly Thr Arg 85 90 His Tyr Ala Gln Leu Ile Val Ser Leu Val Glu Thr Val Phe Arg His 105 110 Phe Gly Gln Thr Gly Leu Glu Leu Leu Thr 120 <210> 3151 <211> 477 <212> PRT <213> Homo sapiens <400> 3151 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Gly 10

Val Gln Ser Leu Leu Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys

Pro Gly Ser Ser Val Thr Val Ser Cys Glu Ala Ser Gly Asp Ser Ser

25

20

		35					40					45			
Pro	Thr	Tyr	Thr	He	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	G1 y	Leu
	50					55					60				
Glu	Trp	Met	Gly	Asp	He	Thr	Pro	Val	Phe	Gly	Thr	Lys	Glu	Met	Ser
65,					70					75					80
Gln	Lys	Phe	Gln	Asp	Arg	Val	Ser	Пe	Thr	Ala	Asp	Ser	Val	Ser	Va]
				85					90					95	
Thr	Ala	Asp	Thr	Arg	Arg	Thr	Val	Tyr	Leu	Glu	Val	Arg	Arg	Leu	Thr
			100					105					110		
Ser	Asp	Asp	Ser	Ala	Val	Tyr	Tyr	Cys	Ala	Lys	Ser	Glu	Thr	Asp	His
		115					120					125			
Ser	Phe	Tyr	Tyr	Tyr	He	Glu	Leu	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr
	130					135					140				
Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro
145					150					155					160
Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val
				165					170					175	
Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala
			180					185					190		
Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly
		195					200					205			
Leu	Tyr	Ser	Leu	Ser	Ser	Va]	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly
	210					215					220				
Thr	Gln	Thr	Tyr	Пе	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys
225					230					235					240
Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys
				245					250					255	
Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu
			260					265					270		
Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	He	Ser	Arg	Thr	Pro	Glu
		275					280					285			
Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	GJu	Asp	Pro	Glu	Val	Lys
	290					295					300				
Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Va]	His	Asn	Ala	Lys	Thr	Lys
305					310					315					320

				325					330					335	
Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys
			340					345					350		
Val	Ser	Asn	Lys	Ala	Leu	Pro	Λla	Pro	Пе	Glu	Lys	Thr	lle	Ser	Lys
		355					360					365			
Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser
	370					375					380				
Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys
385					390					395					400
Gly	Phe	Tyr	Pro	Ser	Asp	He	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln
				405					410					415	
Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	G1 y
			420					425					430		
Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
		435					440					445			
Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
	450					455					460				
His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys			
465					470					475					

<210> 3152

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3152

Ser Phe Asn His Gly His Pro Leu Ser His His Leu Lys Gly His Thr Phe His Val Glu Cys Gly Arg Leu Glu Ser Leu Lys Asn Thr Leu Phe Phe Pro Ile Thr Leu Cys Ser Phe Leu Gly Asn Met Cys Ser Ile Phe Val Ser His Ser Glu Phe Phe Trp Ala Val Cys Arg Trp Ala Trp Thr Asn Phe Arg Ala <210> 3153 <211> 336 <212> PRT <213> Homo sapiens <400> 3153 Met Tyr Thr Val Leu Thr Gly Thr Pro Pro Phe Met Ala Ser Pro Leu Ser Glu Met Tyr Gln Asn lle Arg Glu Gly His Tyr Pro Glu Pro Ala His Leu Ser Ala Asn Ala Arg Arg Leu Ile Val His Leu Leu Ala Pro Asn Pro Ala Glu Arg Pro Ser Leu Asp His Leu Leu Gln Asp Asp Phe Phe Thr Gln Gly Phe Thr Pro Asp Arg Leu Pro Ala His Ser Cys His Ser Pro Pro Ile Phe Ala Ile Pro Pro Pro Leu Gly Arg Ile Phe Arg Lys Val Gly Gln Arg Leu Leu Thr Gln Cys Arg Pro Pro Cys Pro Phe Thr Pro Lys Glu Ala Ser Gly Pro Gly Glu Gly Gly Pro Asp Pro Asp

Ser Met Glu Trp Asp Gly Glu Ser Ser Leu Ser Ala Lys Glu Val Pro

	130					135					140				
Cys	Leu	Glu	Gly	Pro	He	His	Leu	Val	Ala	Gln	Gly	He	Leu	Gln	Ser
145					150					155					160
Asp	Leu	Ala	Gly	Pro	Glu	Gly	Ser	Arg	Arg	Pro	Glu	Val	Glu	Ala	Alа
	•			165					170					175	
Leu	Arg	His	Leu	Gln	Leu	Cys	Leu	Asp	Val	Gly	Pro	Pro	Λla	Thr	Gln
			180					185					190		
Asp	Pro	Leu	Gly	Glu	Gln	Gln	Pro	He	Leu	Trp	Ala	Pro	Lys	Trp	Val
		195					200					205			
Asp	Tyr	Ser	Ser	Lys	Tyr	Gly	Phe	G1 y	Tyr	Gln	Leu	Leu	Asp	Gly	Gly
	210					215					220				
Arg	Thr	Gly	Arg	His	Pro	His	Gly	Pro	Val	Thr	Pro	Arg	Arg	Glu	Gly
225					230					235					240
Thr	Leu	Pro	Thr	Pro	Val	Pro	Pro	Ala	Gly	Pro	Gly	Leu	Cys	Leu	Leu
				245					250					255	
Arg	Phe	Leu	Ala	Ser	Glu	His	Ala	Leu	Leu	Leu	Leu	Phe	Ser	Asn	Gly
			260					265					270		
Met	Val	Gln	Val	Ser	Phe	Ser	G1 y	Val	Pro	Ala	Gln	Leu	Val	Leu	Ser
		275					280					285			
Gly	Glu	Gly	Glu	Gly	Leu	Gln	Leu	Thr	Leu	Trp	Glu	Gln	Gly	Ser	Pro
	290					295					300				
Gly	Thr	Ser	Tyr	Ser	Leu	Asp	Val	Pro	Gln	Ser	His	Gly	Cys	Ala	Pro
305					310					315					320
Thr	Thr	Gly	Gln	His	Leu	His	His	Ala	Leu	Arg	Met	Leu	Gln	Ser	He
				325					330					335	

<210> 3154

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3154

Met Cys Pro Ser Trp Thr Gly Gly Arg Ala Gly His Arg Asp Pro Gly

1 5 10 15

Ser Phe Arg Ser Arg Asp Trp Arg Val Gly Arg His Pro Trp Glu His

			20					25					30		
Pro	Cys	Pro	Pro	Ser	Ala	Ala	Gln	G1 y	Arg	Gly	Gly	Glu	Pro	Gly	Phe
		35					40					45			
Gly	Pro	His	Leu	He	Lys	Ser	Pro	Pro	Gln	Thr	Pro	G1n	Ala	Asn	Thr
	50					55					60				
G1 y	Arg	Trp	Ala	Val	Thr	Pro	Arg	Ser	Pro	Ala	Ala	Ala	Thr	Leu	Leu
65					70					75					80
Trp	Thr	Ser	Ser	Ser	Ser	Ser	Ala	Thr	He	Thr	Arg	Trp	Pro	Ser	Arg
				85					90					95	
Trp	Ala	Gly	Ala	Thr											
			100												
<210)> 3	155													
<211	1> 50	05													
<212	2> PI	RТ													
<213	3> Ho	omo s	sapi	ens											
<400)> 3	155													
Met	Pro	Gln	Gln	Leu	Leu	lle	Thr	Leu	Pro	Thr	Glu	Ala	Ser	Thr	Trp
1				5					10					15	
Val	Lys	Leu	Gln	His	Pro	Lys	Lys	Ala	Val	Glu	Gly	Ala	Pro	Leu	Trp
			20					25					30		
Glu	Asp	Val	Thr	Lys	Met	Phe	Glu	Gly	Glu	Ala	Leu	Leu	Ser	Gln	Asp
		35					40					45			
Ala	Glu	Asp	Val	Lys	Thr	Gln	Arg	Glu	Ser	Leu	Glu	Asp	Glu	Val	Thr
	50					55					60				
Pro	Gly	Leu	Pro	Thr	Ala	Glu	Ser	Gln	Glu	Leu	Leu	Thr	Phe	Lys	Asp
65					70					75					80
He	Ser	He	Asp	Phe	Thr	Gln	Glu	Glu	Trp	Gly	Gln	Leu	Ala	Pro	Ala
				85					90					95	
His	Gln	Asn	Leu	Tyr	Arg	Glu	Val	Met	Leu	Glu	Asn	Tyr	Ser	Asn	Leu
			100					105					110		
Val	Ser	Val	G1v	Tvr	Gln	Leu	Ser	Lvs	Pro	Ser	Val	He	Ser	G1n	Leu
			•	- 3 -											

Glu Lys Gly Glu Glu Pro Trp Met Ala Glu Lys Glu Gly Pro Gly Asp

	130					135					140				
Pro	Ser	Ser	Asp	Leu	Lys	Ser	Lys	He	Glu	Thr	He	Glu	Ser	Thr	Ala
145					150					155					160
Lys	Ser	Thr	Пe	Ser	Gln	Glu	Arg	Leu	Tyr	His	Gly	He	Met	Met	Glu
				165					170					175	
Ser	Phe	Met	Arg	Asp	Asp	He	He	Tyr	Ser	Thr	Leu	Arg	Lys	Val	Ser
			180					185					190		
Thr	Tyr	Asp	Asp	Val	Leu	Glu	Arg	His	Gln	Glu	Thr	Cys	Met	Arg	Asp
		195					200					205			
Val	Arg	Gln	Ala	Ile	Leu	Thr	His	Lys	Lys	Arg	Val	Gln	Glu	Thr	Asn
	210					215					220				
Lys	Phe	Gly	Glu	Asn	He	He	Val	His	Ser	Asn	Val	He	He	Glu	Gln
225					230					235					240
Arg	His	His	Lys		Asp	Thr	Pro	Thr		Arg	Asn	Thr	Tyr		Leu
				245					250					255	
Asp	Leu	He		His	Pro	Thr	Ser		Ile	Arg	Thr	Lys	Thr	Tyr	Glu
_			260					265		_			270		
Cys	Asn		Cys	Glu	Lys	He		Lys	Gln	Pro	lle		Leu	Thr	Glu
		275			Tr)	61	280		Б	DI		285	,	61	0
HIS		Arg	He	His	Ihr		Glu	Lys	Pro	Phe		Cys	Lys	61u	Cys
C1	290	A 1 -	DI	C	C1	295	A 1 -	C	1	C	300	112	C1	A	11.
	Arg	Ala	Pne	Ser		Ser	Ala	ser	Leu		ınr	HIS	Gln	Arg	
305	The	Clu	C1.	Luc	310 Pro	Dho	C1.,	Cva	Clu	315	Cva	Cl.	Lve	Ala	320
nis	1111	Gry	Glu	325	110	rne	Glu	Cys	330	Giu	Cys	Gly	Lys	335	rne
Ara	Hic	Ara	Sor		Lau	Aen	Gln	Hic		Arg	Thr	Hic	Thr		Glu
Mig	1113	mg	340	561	Leu	ASII	0111	345	1113	Mg	1111	1113	350	OIŞ	O, u
Lvs	Pro	Tvr		Cvs	Asp	Lvs	Cvs		Lvs	Ala	Phe	Ser	Gln	Asn	He
2,0		355		0,0		2,0	360	01	2,0			365	0		
Ser	Leu		Gln	His	Leu	Arg		His	Ser	Glv	Glu		Pro	Phe	Thr
	370					375				·	380	•			
Cys		Glu	Cys	Gly	Lys	Thr	Phe	Arg	Gln	He	Arg	His	Leu	Ser	Glu
385			•	-	390					395	-				400
His	He	Arg	11e	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Thr	Ala	Cys
				405					410					415	

Cys Lys Thr Phe Ser His Arg Ala Tyr Leu Thr His His Gln Arg Ile His Thr Gly Glu Arg Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Arg Gln Arg Ile His Leu Ser Asn His Lys Thr Val His Thr Gly Val Lys Ala Tyr Glu Cys Asn Arg Cys Gly Lys Ala Tyr Arg His Asp Ser Ser Phe Lys Lys His Gln Arg His His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser

<210> 3156

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3156

Met Ala Gly Val Glu Glu Val Ala Ala Ser Gly Ser His Leu Asn Gly Asp Leu Asp Pro Asp Asp Arg Glu Glu Gly Ala Ala Ser Thr Ala Glu Glu Ala Ala Lys Lys Lys Arg Arg Lys Lys Lys Ser Lys Gly Pro Ser Ala Ala Gly Glu Gln Glu Pro Asp Lys Glu Ser Gly Ala Ser Val Asp Glu Val Ala Arg Gln Leu Glu Arg Ser Ala Leu Glu Asp Lys Glu Arg Asp Glu Asp Asp Glu Asp Gly Asp Gly Asp Gly Asp Gly Ala Thr Gly Lys Lys Lys Lys Lys Lys Lys Lys Arg Gly Pro Lys Val Gln Thr Asp Pro Pro Ser Val Pro Ile Cys Asp Leu Tyr Pro Asn Gly Val

Phe Pro Lys Gly Gln Glu Cys Glu Tyr Pro Pro Thr Gln Asp Gly Arg Thr Ala Ala Trp Arg Thr Thr Ser Glu Glu Lys Lys Ala Leu Asp Gln Ala Ser Glu Glu Ile Trp Asn Asp Phe Arg Glu Ala Ala Glu Ala His Arg Gln Val Arg Lys Tyr Val Met Ser Trp Ile Lys Pro Gly Met Thr Met Ile Glu Ile Cys Glu Lys Leu Glu Asp Cys Ser Arg Lys Leu Ile Lys Glu Asn Gly Leu Asn Ala Gly Leu Ala Phe Pro Thr Gly Cys Ser Leu Asn Asn Cys Ala Ala His Tyr Thr Pro Asn Ala Gly Asp Thr Thr Val Leu Gln Tyr Asp Asp lle Cys Lys lle Asp Phe Gly Thr His lle Ser Gly Arg Ile Ile Asp Cys Ala Phe Thr Val Thr Phe Asn Pro Lys Tyr Asp Thr Leu Leu Lys Ala Val Lys Asp Ala Thr Asn Thr Gly Ile Lys Cys Ala Gly Ile Asp Val Arg Leu Cys Asp Val Gly Glu Ala Ile Gln Glu Val Met Glu Ser Tyr Glu Val Glu Ile Asp Gly Lys Thr Tyr Gln Arg Arg Arg Ser lle Cys Asn

<210> 3157

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3157

Met Val His Val Glu Cys lle Lys Pro Thr Gly Pro Glu Ser Leu Leu 1 5 10 15 Thr Gly Asp Phe Leu Glu Met Glu Ser Arg Ser Val Ala Gln Ala Gly Glu Cys Asn Gly Ala lle Leu Ala His Cys Asn Leu His Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Gly Cys His His Thr Gln Leu Ser Ile Val Phe Leu Ala Glu Met Gly Phe His His Phe Ala Gln Ala Gly Leu Glu Leu Leu Thr Ser Asn Tyr Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Ala Arg Gly Phe Leu Met Trp Leu Leu Leu Leu Arg Arg Pro Cys Pro

<210> 3158

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3158

Met Pro Leu Ile Leu Ser Ile Leu Ser Gly Asn Val Pro Arg Leu Leu Leu Pro Gly Ser Trp Leu His Asn Leu 11e Phe Pro Lys Arg Val Ala . Ile Pro Ala Ala Pro Gly Thr Ser Glu Pro Leu Pro Leu His Phe Trp Cys Ala Ser Glu Ser Arg Ser Ala Cys Trp Arg Arg Leu Trp Pro Arg Pro Pro Gly Arg Phe Leu Arg Met Gly Ser Thr Arg Gly Ala Glu Pro Gly Thr Lys Trp Thr Ala His Val Cys Cys His Glu Ala Trp Gln Gln His His Thr Pro Leu Cys Gly Val Leu Leu Ala Gly Gly Gln Arg Arg

Ala Leu Ser Ser Pro Ala Thr Ala Ala Ala His Ser Arg Leu Leu Pro Gly His Ile Ala His Trp Pro Gly His Ala Pro Val Leu Trp Gln Pro Leu Val Pro Asp Asn Phe His Pro Asp Ser Gly Pro Cys Arg Leu Gly Ala Asn Thr Arg Ser Pro Ser Gln Ala Phe Leu Pro Leu Pro Ser Ala

Ala Leu

<210> 3159

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3159 Met Ile Lys Glu Ala Gly Ala Ile Ile Ser Thr Arg His Cys Asn Pro Gln Asn Gly Asp Arg Cys Val Ala Ala Leu Ala Arg Val Glu Cys Thr His Phe Leu Trp Pro Met Cys Ile Gly Glu Val Ala His Val Ser Ala Glu lle Thr Tyr Thr Ser Lys His Ser Val Glu Val Gln Val Asn Met Met Ser Glu Asn Ile Leu Thr Gly Ala Lys Lys Leu Thr Asn Lys Ala Thr Leu Trp Tyr Ala Pro Leu Ser Leu Thr Asn Val Asp Lys Val Leu Glu Glu Pro Pro Val Val Tyr Phe Arg Gln Glu Glu Glu Glu Gly Gln Lys Arg Tyr Lys Thr Gln Lys Leu Glu Arg Met Glu Thr Asn Trp

Arg Asn Gly Asp Tle Val Gln Pro Val Leu Asn Pro Glu Pro Asn Thr

Val Ser Tyr Ser Gln Ser Ser Leu Ile His Leu Val Gly Pro Ser Asp Cys Thr Leu His Ser Phe Val His Glu Gly Val Thr Met Lys Val Met Asp Glu Val Ala Gly Ile Leu Ala Ala Arg His Cys Lys Thr Asn Leu Val Thr Ala Ser Met Glu Ala Ile Asn Phe Asp Asn Lys Ile Arg Lys Gly Cys Ile Lys Thr lle Ser Gly Arg Met Thr Phe Thr Ser Asn Lys Ser Val Glu Ile Glu Val Leu Val Asp Ala Asp Cys Val Val Asp Ser Ser Gln Lys Arg Tyr Arg Ala Ala Ser Val Phe Thr

<210> 3160

<211> 458

<212> PRT

<213> Homo sapiens

<400> 3160

Met Glu Leu Pro Leu Gly Arg Cys Asp Asp Ser Arg Thr Trp Asp Asp Asp Ser Asp Pro Glu Ser Glu Thr Asp Pro Asp Ala Gln Ala Lys Ala Tyr Val Ala Arg Val Leu Ser Pro Pro Lys Ser Gly Leu Ala Phe Ser Arg Pro Ser Gln Leu Ser Thr Pro Ala Ala Ser Pro Ser Ala Ser Glu Pro Arg Ala Ala Ser Arg Val Ser Ala Val Ser Glu Pro Gly Leu Leu Ser Leu Pro Pro Glu Leu Leu Glu Ile Cys Ser Tyr Leu Asp Ala Arg Leu Val Leu His Val Leu Ser Arg Val Cys His Ala Leu Arg Asp

.

Leu	Val	Ser	Asp	His	Val	Thr	Trp	Arg	Leu	Arg	Ala	Leu	Arg	Arg	Val
		115					120					125			
Arg	Ala	Pro	Tyr	Pro	Val	Val	Glu	Glu	Lys	Asn	Phe	Asp	Trp	Pro	Ala
	130					135					140				
Ala	Cys	He	Ala	Leu	Glu	Gln	His	Leu	Ser	Arg	Trp	Ala	Glu	Asp	Gly
145					150					155					160
Arg	Trp	Val	Glu	Tyr	Phe	Cys	Leu	Ala	Glu	Gly	His	Val	Ala	Ser	Val
				165					170					175	
Asp	Ser	Val	Leu	Leu	Leu	Gln	Gly	Gly	Ser	Leu	Cys	Leu	Ser	Gly	Ser
			180					185					190		
Arg	Asp	Arg	Asn	Val	Asn	Leu	Trp	Asp	Leu	Arg	Gln	Leu	Gly	Thr	Glu
		195					200					205			
Ser	Asn	Gln	Val	Leu	He	Lys	Thr	Leu	Gly	Thr	Lys	Arg	Asn	Ser	Thr
	210					215					220				
His	Glu	Gly	Trp	Val	Trp	Ser	Leu	Ala	Ala	Gln	Asp	His	Arg	Val	Cys
225					230					235					240
Ser	Gly	Ser	Trp	Asp	Ser	Thr	Val	Lys	Leu	Trp	Asp	Met	Ala	Ala	Asp
				245					250					255	
Gly	Gln	Gln	Phe	Gly	Glu	He	Lys	Ala	Ser	Ser	Ala	Val	Leu	Cys	Leu
			260					265					270		
Ser	Tyr	Leu	Pro	Asp	Ile	Leu	Val	Thr	Gly	Thr	Tyr	Asp	Lys	Lys	Val
		275					280					285			
Thr	He	Tyr	Asp	Pro	Arg	Ala	Gly	Pro	Ala	Leu	Leu	Lys	His	Gln	Gln
	290					295					300				
Leu	His	Ser	Arg	Pro	Val	Leu	Thr	Leu	Leu	Ala	Asp	Asp	Arg	His	He
305					310					315					320
Ile	Ser	Gly	Ser	Glu	Asp	His	Thr	Leu	Val	Val	Val	Asp	Arg	Arg	Ala
				325					330					335	
Asn	Ser	Va]	Leu	Gln	Arg	Leu	Gln	Leu	Asp	Ser	Tyr	Leu	Leu	Cys	Met
			340					345					350		
Ser	Tyr	Gln	Glu	Pro	Gln	Leu	Trp	Ala	Gly	Asp	Asn	Gln	Gly	Leu	Leu
		355					360					365			
His	Val	Phe	Ala	Asn	Arg	Asn	Gly	Cys	Phe	Gln	Leu	He	Arg	Ser	Phe
	370					375					380				
Asp	Val	Gly	His	Ser	Phe	Pro	He	Thr	Gly	He	Gln	Tyr	Ser	Val	G1y

Ala Leu Tyr Thr Thr Ser Thr Asp Lys Thr Ile Arg Val His Val Pro Thr Asp Pro Pro Arg Thr 11e Cys Thr Arg Arg His Asp Asn Gly Leu Asn Arg Val Cys Ala Glu Gly Asn Leu Val Val Ala Gly Ser Gly Asp Leu Ser Leu Glu Val Trp Arg Leu Gln Ala <210> 3161 <211> 631 <212> PRT <213> Homo sapiens <400> 3161 Met Phe Ser Pro Asp Gln Ser Ser Met Pro Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys Ser Pro Gln Val Leu Gly

Ser Ser Leu Ser Val Arg Ser Pro Thr Gly Ser Pro Ser Arg Leu Lys

Ser Pro Ser Met Ala Val Pro Ser Pro Gly Trp Val Ala Ser Pro Lys

Thr	Ala	Met	Pro	Ser	Pro	Gly	Val	Ser	GIn	Asn	Lys	Gln	Pro	Pro	Leu
145					150					155					160
Asn	Met	Asn	Ser	Ser	Thr	Thr	Leu	Ser	Asn	Met	Glu	Gln	Gly	Thr	Leu
				165					170					175	
Pro	Pro	Ser	Gly	Pro	Arg	Ser	Ser	Ser	Ser	Ala	Pro	Pro	Ala	Asn	Pro
			180					185					190		
Pro	Ser	Gly	Leu	Met	Asn	Pro	Ser	Leu	Pro	Phe	Thr	Ser	Ser	Pro	Asp
		195					200					205			
Pro	Thr	Pro	Ser	Gln	Asn	Pro	Leu	Ser	Leu	Met	Met	Thr	Gln	Met	Ser
	210					215					220				
Lys	Tyr	Ala	Met	Pro	Ser	Ser	Thr	Pro	Leu	Tyr	His	Asn	Ala	Ile	Lys
225					230					235					240
Thr	Пе	Ala	Thr	Ser	Asp	Asp	Glu	Leu	Leu	Pro	Asp	Arg	Pro	Leu	Leu
				245					250					255	
Pro	Pro	Pro	Pro	Pro	Pro	Gln	Gly	Ser	Gly	Pro	Gly	He	Ser	Asn	Ser
			260					265					270		
Gln	Pro	Ser	Gln	Met	His	Leu	Asn	Ser	Ala	Ala	Ala	Gln	Ser	Pro	Met
		275					280					285			
Gly	Met	Asn	Leu	Pro	Gly	Gln	Gln	Pro	Leu	Ser	His	Glu	Pro	Pro	Pro
	290					295					300				
Ala	Met	Leu	Pro	Ser	Pro	Thr	Pro	Leu	Gly	Ser	Asn	He	Pro	Leu	His
305					310					315					320
Pro	Asn	Ala	Gln	G1y	Thr	Gly	Gly	Pro	Pro	Gln	Asn	Ser	Met	Met	Met
				325					330					335	
Ala	Pro	Gly	Gly	Pro	Asp	Ser	Leu	Asn	Ala	Pro	Cys	Gly	Pro	Val	Pro
			340					345					350		
Ser	Ser	Ser	Gln	Met	Met	Pro	Phe	Pro	Pro	Arg	Leu	Gln	Gln	Pro	His
		355					360					365			
Gly	Ala	Met	Ala	Pro	Thr	Gly	Gly	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Gln
	370					375					380				
Gln	His	Tyr	Pro	Ser	Gly	Met	Ala	Leu	Pro	Pro	Glu	Asp	Leu	Pro	Asn
385					390					395					400
Gln	Pro	Pro	Gly	Pro	Met	Pro	Pro	Gln	Gln	His	Leu	Met	Gly	Lys	Ala
				405					410					415	
Met	Ala	Gly	Arg	Met	Gly	Asp	Ala	Tyr	Pro	Pro	Gly	Val	Leu	Pro	Gly
			420					425					430		

Val Ala Ser Val Leu Asn Asp Pro Glu Leu Ser Glu Val Ile Arg Pro Thr Pro Thr Gly 11e Pro Glu Phe Asp Leu Ser Arg 11e 11e Pro Ser Glu Lys Pro Ser Ser Thr Leu Gln Tyr Phe Pro Lys Ser Glu Asn Gln Pro Pro Lys Ala Gln Pro Pro Asn Leu His Leu Met Asn Leu Gln Asn Met Met Ala Glu Gln Thr Pro Ser Arg Pro Pro Asn Leu Pro Gly Gln Gln Gly Val Gln Arg Gly Leu Asn Met Ser Met Cys His Pro Gly Gln Met Ser Leu Leu Gly Arg Thr Gly Val Pro Pro Gln Gln Gly Met Val Pro His Gly Leu His Gln Gly Val Met Ser Pro Pro Gln Gly Leu Met Thr Gln Gln Asn Phe Met Leu Met Lys Gln Arg Gly Val Gly Glu Val Tyr Ser Gln Pro Pro His Met Leu Ser Pro Gln Gly Ser Leu Met Gly Pro Pro Pro Gln Gln Asn Leu Met Val Ser His Pro Leu Arg Gln Arg Ser Val Ser Leu Asp Ser Gln Met Gly Tyr Leu Pro Ala Pro Gly Gly Met Ala Asn Leu Pro Phe

<210> 3162

<211> 542

<212> PRT

<213> Homo sapiens

<400> 3162

Met Pro Arg Arg Gly Leu IIe Leu His Thr Arg Thr His Trp Leu Leu

1 5 10 15

Leu	Gly	Leu	Ala	Leu	Leu	Cys	Ser	Leu	Val	Leu	Phe	Met	Tyr	Leu	Leu
			20					25					30		
Glu	Cys	Ala	Pro	Gln	Thr	Asp	Gly	Asn	Ala	Ser	Leu	Pro	Gly	Val	Val
		35					40					45			
Gly	Glu	Asn	Tyr	Gly	Lys	Glu	Tyr	Tyr	Gln	Ala	Leu	Leu	Gln	Glu	Gln
	50					55					60				
Glu	Glu	His	Tyr	Gln	Thr	Arg	Ala	Thr	Ser	Leu	Lys	Arg	Gln	He	Ala
65					70					75					80
Gln	Leu	Lys	Gln	Glu	Leu	Gln	Glu	Met		Glu	Lys	Met	Arg		Leu
				85					90					95	
Gln	Glu	Arg		Asn	Val	Gly	Ala		Gly	lle	Gly	Tyr	Gln	Ser	Asn
			100					105					110		
Lys	Glu		Ala	Pro	Ser	Asp		Leu	Glu	Phe	Leu		Ser	GIn	He
		115	6.1	12 1	C	7.1	120		,		D	125	63	T	63
Asp		Ala	Glu	vai	Ser		GIy	Ala	Lys	Leu		Ser	Glu	lyr	61 y
Vol.	130	Dwo	Dha	C1	Con	135	The	Lau	Mot	Lua	140	Dha	Cln	Lou	C1
145	116	110	гпе	Giu	3ei 150	rne	1111	Leu	met	155	vaı	гне	Gln	Leu	160
	Glv	Lau	Thr	Arg		Pro	Glu	Glu	Lve		Val	Ara	Lys	Asn	
MC C	Oly	Lcu	1111	165	111.5	110	O, u	O, u	170	110	, (1)	мъ	Lys	175	Lys
Arg	Asp	Glu	Leu		Glu	Val	He	Glu		Glv	Leu	Glu	Val		Asn
8	,,,,		180					185					190		
Asn	Pro	Asp	Glu	Asp	Asp	Glu	Gln		Asp	Glu	Glu	Gly	Pro	Leu	Gly
		195					200					205			
Glu	Lys	Leu	He	Phe	Asn	Glu	Asn	Asp	Phe	Val	Glu	Gly	Tyr	Tyr	Arg
	210					215					220				
Thr	Glu	Arg	Asp	Lys	Gly	Thr	G1n	Tyr	Glu	Leu	Phe	Phe	Lys	Lys	Ala
225					230					235					240
Asp	Leu	Thr	Glu	Tyr	Arg	His	Val	Thr	Leu	Phe	Arg	Pro	Phe	Gly	Pro
				245					250					255	
Leu	Met	Lys	Val	Lys	Ser	Glu	Met	11e	Asp	He	Thr	Arg	Ser	He	He
			260					265					270		
Asn	He	lle	Val	Pro	Leu	Ala	Glu	Arg	Thr	GJu	Ala	Phe	Val	Gln	Phe
		275					280					285			
Met		Asn	Phe	Arg	Asp		Cys	He	His	Gln		Lys	Lys	lle	His
	290					295					300				

Leu Thr Val Val Tyr Phe Gly Lys Glu Gly Leu Ser Lys Val Lys Ser Ile Leu Glu Ser Val Thr Ser Glu Ser Asn Phe His Asn Tyr Thr Leu Val Ser Leu Asn Glu Glu Phe Asn Arg Gly Arg Gly Leu Asn Val Gly Ala Arg Ala Trp Asp Lys Gly Glu Val Leu Met Phe Phe Cys Asp Val Asp Ile Tyr Phe Ser Ala Glu Phe Leu Asn Ser Cys Arg Leu Asn Ala Glu Pro Gly Lys Lys Val Phe Tyr Pro Val Val Phe Ser Leu Tyr Asn Pro Ala lle Val Tyr Ala Asn Gln Glu Val Pro Pro Pro Val Glu Gln Gln Leu Val His Lys Lys Asp Ser Gly Phe Trp Arg Asp Phe Gly Phe Gly Met Thr Cys Gln Tyr Arg Ser Asp Phe Leu Thr Ile Gly Gly Phe Asp Met Glu Val Lys Gly Trp Gly Gly Glu Asp Val His Leu Tyr Arg Lys Tyr Leu His Gly Asp Leu Ile Val Ile Arg Thr Pro Val Pro Gly Leu Phe His Leu Trp His Glu Lys Arg Cys Ala Asp Glu Leu Thr Pro Glu Gln Tyr Arg Met Cys lle Gln Ser Lys Ala Met Asn Glu Ala Ser His Ser His Leu Gly Met Leu Val Phe Arg Glu Glu Ile Glu Thr His Leu His Lys Gln Ala Tyr Arg Thr Asn Ser Glu Ala Val Gly

<210> 3163

<211> 222

<212> PRT

<213> Homo sapiens

<400> 3163 Met Tyr Gln Asp Phe Ile Phe Phe Phe Phe Phe Leu Arg Trp Ser Phe Ile Leu Leu Ala Gln Ala Gly Val Gln Trp Cys Ser Leu Ser Ser Leu Gln Pro Leu Pro Ser Arg Phe Lys Arg Phe Ser Cys Leu Gly Phe Pro Ser Ser Gln Asp Tyr Arg Arg Leu Ala Pro Cys Pro Ala Thr Phe Phe Val Phe Leu Val Glu Thr Glv Phe His His Val Glv Gln Ala Glv Leu Lys Leu Leu Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser Gln Arg Ala Gly Ile Thr Gly Val Ser His His Gly Gln Pro Ser Phe Ile Phe Met Glu Lys Asn Ile Ser Leu Tyr Glu Tyr Thr Thr Phe Cys Leu Ser Ile Tyr Pro Leu Ile Gly Cys Phe Tyr Phe Phe Leu Ala Ile Met Asn Asn lle Ala Val Asn Ile Cys Val Gln Gly Phe Ser Gly His Lys Phe Leu Phe Phe Leu Gly 11e Tyr Leu Gly Val Glu Leu Leu Gly His 11e Val lle Leu Phe Asn Phe Leu Lys Asn Phe Pro Thr Val Leu His Gly Gly Cys Ala Ile Val Tyr Ser Tyr Gln Gln Cys Met Lys Leu Gln Ile Ser

Pro His Pro Glu Asn Pro Phe lle lle Phe Cys Phe Ser Phe

<210> 3164

<211> 477

<212> PRT

<213> Homo sapiens

<40	0> 3	164													
Met	Tyr	, Asp	Ala	Glu	Arg	Gly	Trp	Ser	Leu	Ser	Phe	Ala	Gly	Cys	Gly
1				5					10					15	
Phe	Leu	Gly	Phe	Tyr	His	Val	Gly	Ala	Thr	Arg	Cys	Leu	Ser	Glu	His
			20					25					30		
Ala	Pro	His	Leu	Leu	Arg	Asp	Ala	Arg	Met	Leu	Phe	Gly	Ala	Ser	Ala
		35					40					45			
Gly	Ala	Leu	His	Cys	Val	Gly	Val	Leu	Ser	Glu	Gln	Thr	Leu	Gln	Val
	50					55					60				
Leu	Ser	Asp	Leu	Val	Arg	Lys	Ala	Arg	Ser	Arg	Asn	He	Gly	He	Phe
65					70					75					80
His	Pro	Ser	Phe	Asn	Leu	Ser	Lys	Phe	Leu	Arg	Gln	Gly	Leu	Cys	Lys
				85					90					95	
Cys	Leu	Pro	Ala	Asn	Val	His	G1n	Leu	lle	Ser	Gly	Lys	Ile	Cys	Ile
			100					105					110		
Ser	Leu	Thr	Arg	Val	Ser	Asp	Gly	Glu	Asn	Val	Leu	Val	Ser	Asp	Phe
		115					120					125			
Arg	Ser	Lys	Asp	Glu	Val	Val	Asp	Ala	Leu	Val	Cys	Ser	Cys	Phe	Met
	130					135					140				
Pro	Phe	Tyr	Ser	Gly	Leu	He	Pro	Pro	Ser	Phe	Arg	Gly	Val	Arg	Tyr
145					150					155					160
Val	Asp	Gly	Gly	Val	Ser	Asp	Asn	Val	Pro	Phe	He	Asp	Ala	Lys	Thr
				165					170					175	
Thr	He	Thr	Val	Ser	Pro	Phe	Tyr	Gly	Glu	Tyr	Asp	He	Cys	Pro	Lys
			180					185					190		
Val	Lys	Ser	Thr	Asn	Phe	Leu			Asp	He	Thr		Leu	Ser	Leu
		195					200					205			
Arg		Cys	Thr	Gly	Asn		Tyr	Leu	Leu	Ser	Arg	Ala	Phe	Val	Pro
	210					215					220				
	Asp	Leu	Lys	Val	Leu	Gly	G] u	He	Cys		Arg	Gly	Tyr	Leu	Asp
225					230					235					240
Ala	Phe	Arg	Phe		G] u	Glu	Lys	Gly		Cys	Asn	Arg	Pro		Pro
				245					250					255	
Gly	Leu	Lys	Ser	Ser	Ser	Glu	Gly	Met	Asp	Pro	Glu	Val	Ala	Met	Pro

			260					265					270		
Ser	Trp	Ala	Asn	Met	Ser	Leu	Asp	Ser	Ser	Pro	Glu	Ser	Ala	Ala	Leu
		275					280					285			
Ala	Val	Arg	Leu	Glu	Gly	Asp	Glu	Leu	Leu	Asp	His	Leu	Arg	Leu	Ser
	290					295					300				
lle	Leu	Pro	Trp	Asp	Glu	Ser	Ile	Leu	Asp	Thr	Leu	Ser	Pro	Arg	Leu
305					310					315					320
Ala	Thr	Ala	Leu	Ser	Glu	Glu	Met	Lys	Asp	Lys	Gly	Gly	Tyr	Met	Ser
				325					330					335	
Lys	Ile	Cys	Asn	Leu	Leu	Pro	Ile	Arg	Ile	Met	Ser	Tyr	Val	Met	Leu
			340					345					350		
Pro	Cys	Thr	Leu	Pro	Val	Glu	Ser	Ala	Ile	Ala	Ile	Val	Gln	Arg	Leu
		355					360					365			
Val	Thr	Trp	Leu	Pro	Asp	Met	Pro	Asp	Asp	Val	Leu	Trp	Leu	Gln	Trp
	370					375					380				
Val	Thr	Ser	Gln	Val	Phe	Thr	Arg	Val	Leu	Met	Cys	Leu	Leu	Pro	Ala
385					390					395					400
Ser	Arg	Ser	Gln	Met	Pro	Val	Ser	Ser	Gln	Gln	Ala	Ser	Pro	Cys	Thr
				405					410					415	
Pro	Glu	Gln	Asp	Trp	Pro	Cys	Trp	Thr	Pro	Cys	Ser	Pro	Glu	Gly	Cys
			420					425					430		
Pro	Ala	Glu	Thr	Lys	Ala	Glu	Ala	Thr	Pro	Arg	Ser	He	Leu	Arg	Ser
		435					440					445		,	
Ser	Leu	Asn	Phe	Phe	Leu	Gly	Asn	Lys	Val	Pro	Ala	Gly	Ala	Glu	Gly
	450					455					460				
Leu	Ser	Thr	Phe	Pro	Ser	Phe	Ser	Leu	Glu	Lys	Ser	Leu			
465					470					475					

<210≥ 3165

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3165

 $\hbox{Met Arg Arg Cys Arg Arg Cys Ala Arg Trp Pro His Arg Cys Pro Gly}$

Pro Gln Ser Gly Pro Arg Ser His Phe Ser Pro Trp Pro Arg Thr Leu Gly Pro Ala Pro Ala Leu Cys Val Arg Thr Pro Leu Arg Pro Gly Pro Ser Ser Ala Leu Gly Pro Leu Ser Ala Cys Pro Ser Val Pro Asp Tyr Thr Ala Ser Pro Pro Ala Gly Asp Ser Ala Arg Ser Ile Val Ala Ala Ser Arg Ala Ala Gly Ser Gly Ser Thr Pro Gly Ala Gly Ser Lys Asp Cys Ser Pro Pro Pro His Ser His Ser Ala Ala Ala Gly Glu Ser Gly Asp 11e Gly Pro Gly Ser Gly Ala Val Glu Ala Pro Gly Arg Gly Ala Arg Arg Pro Thr Arg Gln Arg Glu Asp Gly Gly Gly Ala Val Gly Cys Phe Gly Val Ser Arg His Arg Gly Arg Glu Ala Gln Met Ser His Ser Ser His Cys Gly Ser Arg Ser Cys Ser Ala Ala Ala Arg Pro Ser Leu Leu Gln Leu Ala <210> 3166 <211> 142 <212> PRT <213> Homo sapiens <400> 3166

Met Asn Val Val Ala Gln Arg Arg Gly Glu Gly Trp Gly Glu Met Arg

1 5 10 15

Asn Arg Lys Lys Ile Pro Arg Glu Ile Lys Arg Pro Arg Gly Ala Glu

20 25 30

Pro Gly Ser Arg Trp Ser Arg Gln Met Glu Gln Gln Arg Gln Arg Thr

35 40 45 Glu Pro Gln Ser Gly His Thr Ala Arg Pro Gly Ser Gln Ala Leu Trp 50 55 60 Val Trp Trp Glu Gln Met Leu Val Trp Glu Gln Gln Leu Met Ala Pro 65 70 75 Ser Thr Cys Ile Leu Val Asp Ser Arg Pro Ser Thr Ala Ser Ser Ala 90 Ala Gly Leu Ser Leu Glu Glu Gln Pro Trp Ser Arg Glu Ala Asp Glu 100 105 110 Trp Gln Pro Cys Pro Val Gly Ala Pro Val Leu Leu His Pro Pro 125 120 Pro Gly Ser Ala His Leu Leu Arg Leu Pro Pro Arg Ala Ser 135 140

<210> 3167

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3167

Met Ile Ala Gln Arg Arg Asp Ala Met Ala His Arg Ile Leu Ser Ala 1 5 10 15

Arg Leu His Lys Ile Lys Gly Leu Lys Asn Glu Leu Ala Asp Met His $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

His Lys Leu Glu Ala Ile Leu Thr Glu Asn Gln Phe Leu Lys Gln Leu 35 40 45

Gln Leu Arg His Leu Lys Ala lle Gly Lys Tyr Glu Asn Ser Gln Asn 50 55 60

Asn Leu Pro Gln Ile Met Ala Lys His Gln Asn Glu Val Lys Asn Leu
65 70 75 80

Arg Gln Leu Leu Arg Lys Ser Gln Glu Lys Glu Arg Thr Leu Ser Arg 85 90 95

Lys Leu Arg Glu Thr Asp Ser Gln Leu Leu Lys Thr Lys Asp Ile Leu
100 105 110

Gln Ala Leu Gln Lys Leu Ser Glu Asp Lys Asn Leu Ala Glu Arg Glu

Glu Leu Thr His Lys Leu Ser Ile Ile Thr Thr Lys Met Asp Ala Asn Asp Lys Lys Ile Gln Val Cys Ile Ser Gly Ala Gln Thr Val <210> 3168 <211> 196 <212> PRT <213> Homo sapiens <400> 3168 Met Gly Asn Lys Ala Lys Ile Ala Lys Cys Pro Leu Arg Thr Lys Thr Gly His Ile Leu Lys Ser Thr Gln Asp Thr Cys Ile Gly Ser Glu Lys Leu Leu Gln Lys Lys Pro Val Gly Ser Glu Thr Ser Gln Ala Lys Gly Glu Lys Asn Gly Met Thr Phe Ser Ser Thr Lys Asp Leu Cys Lys Gln Cys Ile Asp Lys Asp Cys Leu His Ile Gln Lys Glu Ile Ser Pro Ala Thr Pro Asn Met Gln Lys Thr Arg Asn Thr Val Asn Thr Ser Leu Val Gly Lys Gln Lys Pro His Lys Lys His Ile Thr Ala Glu Asn Met Lys Ser Ser Leu Val Cys Leu Thr Gln Asp Gln Leu Gln Gln Ile Leu Met Thr Val Asn Gln Gly Asn Arg Ser Leu Ser Leu Thr Glu Asn Gly Lys Glu Ala Lys Ser Gln Tyr Ser Leu Tyr Leu Asn Ser Ile Ser Asn Gln Pro Lys Asp Glu Asn Ile Met Gly Leu Phe Lys Lys Thr Glu Met Val

Ser Ser Val Pro Ala Glu Asn Lys Ser Val Leu Asn Glu His Gln Glu

180 185 190

Thr Ser Lys Gln 195

<210> 3169

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3169

Met Ser Thr Arg Val Asn Cys Pro Leu Asn Cys Pro Asn Met Ala Ser

1 5 10 15

Tyr Ser Leu Met Glu Asn Pro Arg Gly Arg Val Tyr Pro His Phe Ser

20 25 30

Leu Asn Lys Lys Val Phe Ile Pro Lys Thr Gly Gly Gly Arg Gly Gly

5 40 4

Ser Met Thr Lys Ser Pro Ser Val Ala Gln Ala Gly Val Gln Gly Val

50 55 60

lle Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Gly Asp Ser Pro

5 70 75 8

Ala Ser Ala Ser Arg Glu Ala Gly 11e Ala Gly Ala His His Gln Pro

85 90 95

Gly Gln His Gly Lys Thr Pro Ser Leu Leu Lys Met Gln Thr Leu Ala

100 105 110

Gly His Gly Gly Thr Cys Leu

115

<210> 3170

<211> 675

<212> PRT

<213> Homo sapiens

<400> 3170

Met Leu Leu Ala Pro Gln Gly Arg Ser Phe Ser Lys Lys Arg Met Gly

1				5					10					15	
Leu	Asn	Arg	Trp	Lys	Arg	Phe	Thr	Arg	Lys	Pro	Ser	Pro	Lys	Pro	Thr
			20					25					30		
Phe	Gly	Pro	Asp	Ser	Val	Glu	His	Trp	Пе	Lys	Arg	Val	Glu	Lys	Ala
		35					40					45			
Ser	Glu	Phe	Ala	Val	Ser	Asn	Ala	Phe	Phe	Thr	Arg	Asn	Ser	Asp	Leu
	50					55					60				
Pro	Arg	Ser	Pro	Trp	Gly	Gln	lle	Thr	Asp	Leu	Lys	Thr	Ser	Glu	Gln
65					70					75					80
He	Glu	Asp	His	Asp	Glu	He	Tyr	Ala	Glu	Ala	Gln	Glu	Leu	Val	Asn
				85					90					95	
Asp	Trp	Leu	Asp	Thr	Lys	Leu	Lys	Gln	Glu	Leu	Ala	Ser	Glu	Glu	Glu
			100					105					110		
Gly	Asp	Ala	Lys	Asn	Thr	Val	Ser	Ser	Val	Thr	He	Met	Pro	Glu	Ala
		115					120					125			
Asn		His	Leu	Lys	Tyr	Asp	Lys	Phe	Asp	Asp	Leu	Cys	Gly	Tyr	Leu
	130					135					140				
Glu	Glu	Glu	Glu	Glu		Thr	Thr	Va]	Gln		Phe	lle	Asp	His	
145					150					155					160
Leu	His	Lys	Asn		Val	Asp	Ser	Ala		Met	Glu	Asp	Leu	Gly	Arg
				165					170					175	
Lys	Glu	Asn		Asp	Lys	Lys	Gln		Lys	Asp	Pro	Arg		Thr	Met
			180					185					190	0.1	
Glu	Met		His	Lys	GIn	Val		Glu	Asn	Arg	Leu		Arg	Glu	Lys
C1	,	195	т	C1		7.1	200	,	TI		,	205	C	4.7	DI
Glu		Glu	lyr	GIn	Arg			Lys	Ihr	Leu		Lys	Ser	Ala	Phe
1	210	A1 =	C1	Cum	1	215		C1	C1	Luc	220	A 20.00	Luc	41.	Lau
	GIU	Ala	6111	Cys	230	vai	GIN	Glu	Gru	235	Lys	Arg	Lys	Ala	240
225	110	Lva	Luc	C1		Clu	C1.,	110	Cln		C1,,	Mot	Vol	Lys	
Glu	MIA	Lys	Lys	245	GIU	Glu	GIU	116	250	ΛI g	Olu	мес	val	255	Leu
Ara	Ara	Glu	Ho		Glu	Ara	Ara	Ara		Val	lve	Ala	Δla	Trp	lve
AI g	AI g	014	260	110	Giu	Aig	Mg	265	1111	101	Lys	MIA	270	1149	1.7.3
He	Glu	lve		Aro	Gln	Glu	Glu		Ser	Gln	Asn	Ser		Glu	lve
.1.10	GIU	275	Lyo	шв	OIII	Olu	280	11911	501	OIII	11311	285	COL	Olu	د ډيه
Val	Met		Gln	Ser	Thr	His		Leu	Pro	Asp	Glu		Lvs	Met	Val

	290					295					300				
Lys	Glu	Arg	Lys	Arg	Lys	Leu	Lys	Glu	Val	Leu	He	Gln	Thr	Phe	Lys
305					310					315					320
Glu	Asn	Gln	Gln	Cys	Gln	Lys	Arg	Tyr	Phe	Ala	Ala	Trp	His	Lys	Leu
				325					330					335	
He	Leu	Asp	His	Arg	He	Lys	Leu	Gly	Lys	Ala	Gly	Thr	Leu	Ser	Asp
			340					345					350		
Trp	Lys	lle	Gln	Leu	Lys	Val	Leu	Arg	Ala	Trp	Arg	Asp	Tyr	Thr	Arg
		355					360					365			
Phe	Gln	Lys	Leu	Glu	Arg	Glu	Thr	Gln	Ala	Leu	Glu	Asn	Asp	Leu	Arg
	370					375					380				
Glu	Glu	Asn	Arg	Lys	Gln	Gln	Leu	Ala	Thr	Glu	Tyr	Asn	Arg	Lys	Gln
385					390					395					400
Val	Leu	Arg	His	Cys	Phe	Thr	Glu	Trp	Gln	His	Trp	His	Gly	Ala	Glu
				405					410					415	
Leu	Leu	Lys	Arg	Glu	Leu	Ala	Leu	Thr	Lys	Glu	Glu	Thr	Arg	Lys	Lys
			420					425					430		
Met	Asp	Ala	Leu	Leu	Gln	Ala	Ala	Ser	Leu	Gly	Lys	Leu	Ser	Ala	Asn
		435					440					445			
Gly	Leu	Ser	Gly	He	Ser	Leu	Pro	Glu	Glu	Ala	Thr	Ala	Met	Val	Gly
	450					455					460				
Pro	Pro	Val	Lys	Asn	Gly	Gln	Glu	Thr	Ala	Val	Pro	Pro	Leu	Trp	Glu
465					470					475					480
Lys	Pro	Pro	Leu	Gly	Ser	Ser	Gly	Cys	Met	Leu	Ser	Pro	Pro	Leu	Gly
				485					490					495	
Arg	Thr	Thr	Thr	Gly	Asn	Leu	Gln	Gly	Ser	Leu	Gln	Λsn	Val	Ser	Leu
			500					505					510		
Ser	Ala	Pro	Gly	Asn	Lys	Gln	His	Lys	Thr	Leu	Gly	Ala	Glu	Pro	Ser
		515					520					525			
Gln	Gln	Pro	Gly	Ser	Asn	Glu	Thr	Leu	Arg	Thr	Thr	Ser	Gln	Lys	Ala
	530					535					540				
Glu	Pro	Leu	Cys	Leu	Gly	His	Phe	His	Asn	Arg	His	Val	Phe	Gln	Gln
545					550					555					560
Gln	Leu	He	Glu	Lys	Gln	Lys	Lys	Lys	Leu	Gln	Glu	Gln	Gln	Lys	Thr
				565					570					575	
He	Leu	Glu	Leu	Lys	Lys	Asn	Leu	Gln	Leu	Ala	Glu	Ala	Gln	Trp	Ala

Ala Glu His Ala Leu Ala Val Thr Glu Ala Gln Ser His Leu Leu Ser Lys Pro Arg Glu Glu Glu Pro Arg Thr Cys Gln Met Leu Val Asn Ser Pro Val Ala Ser Pro Gly Thr Glu Gly Arg Ser Asp Ser Arg Asn Ser Leu Ser Gly Leu Arg Arg Lys Pro Lys Gln Leu Met Thr Pro His Pro Ile Leu Lys Ala Met Glu Glu Arg Ala Ile Gln Arg Ala Glu Cys Arg Arg Ile Leu <210> 3171 <211> 188 <212> PRT <213> Homo sapiens <400> 3171 Met Gly Phe His His Val Gly Gln Ala Gly Leu Gly Leu Leu Thr Ser Cys Ser Thr Arg Phe Gly Leu Pro Arg Phe Trp Asp Tyr Arg Cys Glu Pro Pro Cvs Thr Ala Gly Leu Thr Phe Gly Lys Ala Leu Ser Leu Trp Thr Phe Ala Ser Leu Lys Arg Arg Trp Glu His lle Met Thr Ala Cys His His Cys Phe Ser Asp Tyr His Asn Ser 11e Met Leu Ser Arg Thr Ser Gly Pro Val Phe Thr Thr Gly Lys Thr Tyr Phe Arg Leu Asp Ser Leu Lys Arg Ser Asn Ala Leu Val Gly Cys Gly Glu Gly Lys Ile Arg

Thr Leu Thr Leu Lys Asp Thr Ser Glu lle Val Arg Ser Leu Gly Ser

120 125 115 Trp Ser Thr Arg Leu His Ala Leu Arg Pro Ser Val Val Phe Ser Glu 135 140 130 Gln Ala Leu Ser Thr Ser Ser Arg Lys Gln Gln Gln Lys Asn Thr Ser 150 155 160 145 Phe Leu Pro Cys Leu Leu Asp Met Lys Arg Gln Leu His Ser Thr Leu 170 165 His Tyr Val Leu His Val Ala Leu Ser Val Tyr Ala 180 185

<210> 3172

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3172

65 70 75 80

Lys Pro Ser Arg Cys Arg Asp Arg Ala His Pro Asp Pro Thr Pro Ala 85 90 95

Gly Gln Arg Cys Ala Gln Pro Gln Leu Leu Pro Ala Pro Leu Ser Ser 100 105 110

His Phe Pro Glu Ser Arg Gly Ser Arg Leu Arg Pro Gln Pro Ala Pro 115 120 125

Glu Lys Gly Pro His Ser Ala Ala Gly Gly

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<210> 3173
<211> 221
<212> PRT
<213> Homo sapiens
<400> 3173
Met Ala Ala Ala Gly Pro Leu Cys Thr Glu Arg Val Ser Val Leu Ser
                  5
  1
                                     10
Gln Pro Asn Ser Gly Val Glu Asp Pro Thr Pro Ala Gly Gly Arg Gly
                                 25
             20
Gln Gly Arg Arg Gly Arg Glu Glu Leu Glu Ser 11e Gly Ala Gly
                             40
                                                 45
Pro Gly Ala Ser Val Arg 11e Leu Pro Ala Leu Arg Pro Gly Leu Gly
     50
                                             60
                         55
Gly Val Trp Gly Ala Gly Ala Ala Ser Leu Val Phe Gln Ala Gly Pro
                                         75
Gly Ser Ser Trp Leu Gly Trp Pro Asp Leu Asp Leu Ala Leu Tyr Arg
                                     90
                 85
Gly Trp Ala Cys Arg Ser Glu Gly Thr Ala Asn Val Ala Phe Pro Gly
            100
                                105
                                                     110
Thr Ala Ser Pro Gly Phe Ser Arg Ala Arg Gln Thr Arg Asp Leu Arg
                           120
                                                125
Lys Pro Ala Leu Lys Thr Pro Ser His Thr Ala Ser Gln Leu Ala Ala
    130
                        135
                                             140
Glu Ala Gly Asn Pro Ser Gly Gly Cys Pro Ser Met Arg Cys Gln Arg
                    150
                                        155
Arg Val Gly Ala Leu Val Pro Thr Trp Lys Gly Gly Trp Arg Asp Gly
                                     170
                165
                                                         175
Trp Ser Gly Ser Gly Gly Arg Ala Lys Glu Arg Ile Leu Ala Phe Ser
                                185
                                                     190
            180
Phe Pro Ala Gly Gly Gly Ile Arg Gly Glu Arg Val Gln Ala Ala Ser
                            200
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Asn Thr Arg He Trp Glu Glu Pro Gly Ser Thr Pro Asn

<210> 3174

<211> 176 <212> PRT

<213> Homo sapiens

<400> 3174

Met Tyr Ala Cys Val Cys Asp Trp Leu Gly Phe Ser Tyr Arg Glu Glu

1 5 10 15

Val Gln Trp Asp Val Asp Thr Ile Tyr Leu Thr Gln Asp Thr Arg Glu
20 25 30

Leu Asn Leu Gln Asp Phe Ser His Leu Asp His Arg Asp Leu Ile Pro
35 40 45

11e 11e Ala Ala Leu Glu Tyr Asn Gln Trp Phe Thr Lys Leu Ser Ser 50 55 60

Lys Asp Leu Lys Leu Ser Thr Asp Val Cys Glu Gln lle Leu Arg Val 65 70 75 80

Val Ser Arg Ser Asn Arg Leu Glu Glu Leu Val Leu Glu Asp Ala Gly

85 90 95

Leu Arg Thr Asp Phe Ala Gln Lys Leu Ala Ser Ala Leu Ala His Asn $100 \hspace{1cm} 105 \hspace{1cm} 110$

Pro Asn Ser Gly Leu His Thr Ile Asn Leu Ala Gly Asn Pro Leu Glu 115 120 125

Asp Arg Glu Thr Thr Thr Lys Ile Lys Arg Gln Asn Val Pro Thr Val 130 135 140

Leu Gln Thr Tyr Leu Val Val Cys Pro Ser Asp Tyr Gln Pro Cys Pro 145 150 155 160

Leu Pro Leu Gly Lys Asp Asn Tyr Tyr Ser Asp Phe Ser His Asp Gly
165 170 175

<210> 3175

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3175 Met Arg Val Ser Ser Gly Val Ala Thr Gly Leu Leu Glu Asn Gln Arg 10 1 15 Arg Arg Glu Gln Pro Arg Ser Gly Gly Arg Arg Pro Gly Pro Gly Pro 20 25 Leu Leu Pro Gln Gln Ala Pro His Pro Arg Ile Ile Cys Ser Arg Ala 40 Ala Pro Thr Ser Leu Ser Leu Pro His Pro Arg Ser Arg Phe Arg Arg 50 60. Ser Gly His Ala Gly Ala Ser Ala Gly Cys Gly Arg Pro Ser Arg Gly 70 75 Leu Gly Glu Gly Ser Gly Leu Lys Phe Thr Leu Ser Leu Arg Gly Leu 90 85 Glu Ala Pro Arg Pro Pro Arg Thr Val Ser Ser Ala Ala Gly Cys Ala 100 105 110

Leu Gly Gly Ser Ser Pro Ser Val Leu Pro Thr Gly Val Gly Arg Gly 120

125

<210> 3176

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3176

Met Ile Thr Leu Ala Ser Pro Leu Cys Pro Ile Ile Ser Gln Val Pro 10 lle Leu Lys Arg Lys Arg Lys Glu Gly Gly Asn Glu Gly Arg Glu Gly 20 25 30 Gly Arg Lys Glu Gly Arg Met Glu Gly Arg Lys Glu Gly Lys Gly Glu

40

Arg Glu Gly Arg Arg Glu Gly Arg Lys Leu Ser Asn Pro Ser Ser Val 55 60

Gln Ser Arg Arg Arg Phe His Gly Thr Pro Arg Ile Asp Arg Phe Leu 65 70 75

Leu Leu Ser Trp Trp Met Glu Met Pro Thr Ser Ser Cys Glu Ser Leu

Pro Glu Gly Leu Ile Val Ala Pro Ser Ser Val Gly Leu Thr Ser Leu Phe Ser Leu Glu Gly Leu Ala lle Glu Arg Gln Val Met Cys Cys Phe Arg Lys Gln Asn Trp Asp Met Ser <210> 3177 <211> 303 <212> PRT <213> Homo sapiens <400> 3177 Met Ala Leu Asp Phe Leu Ala Gly Cys Ala Gly Gly Val Ala Gly Val Leu Val Gly His Pro Phe Asp Thr Val Lys Val Arg Leu Gln Val Gln Ser Val Glu Lys Pro Gln Tyr Arg Gly Thr Leu His Cys Phe Lys Ser Ile Ile Lys Gln Glu Ser Val Leu Gly Leu Tyr Lys Gly Leu Gly Ser Pro Leu Met Gly Leu Thr Phe Ile Asn Ala Leu Val Phe Gly Val Gln Gly Asn Thr Leu Arg Ala Leu Gly His Asp Ser Pro Leu Asn Gln Phe Leu Ala Gly Ala Ala Ala Gly Ala Ile Gln Cys Val Ile Cys Cys Pro Met Glu Leu Ala Lys Thr Arg Leu Gln Leu Gln Asp Ala Gly Pro Ala

Arg Thr Tyr Lys Gly Ser Leu Asp Cys Leu Ala Gln Ile Tyr Gly His

Glu Gly Leu Arg Gly Val Asn Arg Gly Met Val Ser Thr Leu Leu Arg

Glu Thr Pro Ser Phe Gly Val Tyr Phe Leu Thr Tyr Asp Ala Leu Thr

				165					170					175	
Arg	Ala	Leu	Gly	Cys	Glu`	Pro	Gly	Asp	Arg	Leu	Leu	Val	Pro	Lys	Leu
			180					185					190		
Leu	Leu	Ala	Gly	Gly	Thr	Ser	Gly	He	Val	Ser	Trp	Leu	Ser	Thr	Tyr
		195					200					205			
Pro	Val	Asp	Val	Val	Lys	Ser	Arg	Leu	Gln	Ala	Asp	Gly	Leu	Arg	Gly
	210					215					220				
Ala	Pro	Arg	Tyr	Arg	Gly	He	Leu	Asp	Cys	Val	His	Gln	Ser	Tyr	Arg
225					230					235					240
Ala	Glu	Gly	Trp	Arg	Val	Phe	Thr	Arg	Gly	Leu	Ala	Ser	Thr	Leu	Leu
				245					250					255	
Arg	Ala	Phe	Pro	Val	Asn	Ala	Ala	Thr	Phe	Ala	Thr	Val	Thr	Val	Val
			260					265					270		
Leu	Thr	Tyr	Ala	Arg	Gly	Glu	Glu	Ala	Gly	Pro	Glu	Gly	Glu	Ala	Val
		275					280					285			
Pro	Ala	Ala	Pro	Ala	Gly	Pro	Ala	Leu	Ala	Gln	Pro	Ser	Ser	Leu	
	290					295					300				

<211> 694

<212> PRT

<213> Homo sapiens

<400> 3178

 Met
 Ala
 Leu
 Gly
 Lys
 Leu
 Arg
 Pro
 Pro
 Thr
 Pro
 Pro
 Met
 Val
 Ile
 Leu

 Glu
 Pro
 Tyr
 Val
 Leu
 Ser
 Glu
 Leu
 Pro
 Pro
 Ile
 Ser
 His
 Glu
 Tyr
 Tyr

 Asp
 Pro
 Ala
 Glu
 Pro
 Glu
 Glu
 Fro
 Glu
 Fro
 Glu
 Glu
 Ala
 Asp
 Arg
 Leu

 Asp
 Glu
 Leu
 Glu
 Tyr
 Glu
 Glu
 Val
 Glu
 Leu
 Tyr
 Lys
 Ser
 Ser
 His
 Arg

 50
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro
 Glu
 Ala
 Asp
 Arg
 Leu

 Asp
 Glu
 Leu
 Glu
 Val
 Glu
 Leu
 Tyr
 Lys
 Ser
 Ser
 His
 Arg

 55
 Fro
 Asp Lys Leu Gly Leu Met Val Cys Tyr Arg Thr Asp Asp Glu Glu Asp
65 70 75 80

Leu Gly Ile Tyr Val Gly Glu Val Asn Pro Asn Ser lle Ala Ala Lys

				85					90					95	
Asp	Gly	Arg	He	Arg	Glu	Gly	Asp	Arg	He	He	Gln	He	Asn	G1 y	Val
			100					105					110		
Asp	Val	Gln	Asn	Arg	Glu	Glu	Ala	Val	Ala	lle	Leu	Ser	Gln	Glu	Glu
		115					120					125			
Asn	Thr	Asn	He	Ser	Leu	Leu	Val	Ala	Arg	Pro	Glu	Ser	Gln	Leu	Ala
	130					135					140				
Lys	Arg	Trp	Lys	Asp	Ser	Asp	Arg	Asp	Asp	Phe	Leu	Asp	Asp	Phe	Gly
145					150					155					160
Ser	Glu	Asn	Glu	Gly	Glu	Leu	Arg	Ala	Arg	Lys	Leu	Lys	Ser	Pro	Pro
				165			٠		170					175	
Ala	Gln	Gln	Pro	Gly	Asn	Glu	Glu	Glu	Lys	G1 y	Ala	Pro	Asp	Ala	·G1y
			180					185					190		
Pro	Gly	Leu	Ser	Asn	Ser	Gln	Glu	Leu	Asp	Ser	Gly	Val	Gly	Arg	Thr
		195					200					205			
Asp	Glu	Ser	Thr	Arg	Asn	Glu	Glu	Ser	Ser	Glu	His	Asp	Leu	Leu	Gly
	210					215					220				
Asp	Glu	Pro	Pro	Ser	Ser	Thr	Asn	Thr	Pro	Gly	Ser	Leu	Arg	Lys	Phe
225					230					235					240
Gly	Leu	Gln	Gly	Asp	Ala	Leu	Gln	Ser	Arg	Asp	Phe	His	Phe	Ser	Met
				245					250					255	
Asp	Ser	Leu		Ala	Glu	Gly	Ala		Leu	G1 y	Gly	Gly	Asp	Val	Pro
			260			_		265					270		
Gly	Leu		Asp	Glu	Glu	Tyr		Arg	Tyr	Arg	Glu		Leu	Glu	He
		275		0.1		0.1	280	0.1		0.1	,	285	131	Б	
Lys		H1S	Leu	Glu	Asn	Gly	Asn	GIn	Leu	Gly		Leu	Phe	Pro	Arg
A 1 -	290	C1	C1	A	C	295	1	A	W. 1	Α	300	A	C1	C	1
	Ser	бту	GIŸ	Asn		Ala	Leu	Asp	vaı		Arg	Asn	GIU	261.	
305	u; a	C1	Mad	A1.	310 Mad	1	C1	C1	C1	315	A 20. 00	11: -	1	C1	320
бту	nis	01u	мет	325	Me t	Leu	GIU	GIU		Leu	Arg	ms	Leu	335	rne
Luc	Cve	Ara	Acn		Lou	Arg	41a	Cln	330 Luc	Mot	Cln	Cln	Lou		Clu
Lys	Cys	A1 g	340	116	Leu	AI g	пта	345	rys	me t	0111	1110	350	AI g	oru
Ara	Cve	Mot		Δla	Trn	Leu	Lou		Clu	Clu	Sor	Lou		Acn	Lau
мв	Uys	355	Lys	uid	11 b	Leu	360	oju	oru	010	OC1	365	1 y 1	nsp	Leu
Ala	Ala	_	Glu	Pro	lve	Lve		Glu	Leu	Ser	Asp		Ser	Glu	Leu

	370					375					380				
Pro	Glu	Lys	Ser	Asp	Lys	Asp	Ser	Thr	Ser	Thr	Tyr	Asn	Thr	Gly	Glu
385					390					395					400
Ser	Cys	Arg	Ser	Thr	Pro	Leu	Leu	Val	Glu	Pro	Leu	Pro	Glu	Ser	Pro
				405					410					415	
Leu	Arg	Arg	Ala	Thr	Ala	Gly	Asn	Ser	Asn	Leu	Asn	Arg	Thr	Pro	Pro
			420					425					430		
Gly	Pro	Ala	Val	Ala	Thr	Pro	Ala	Lys	Ala	Ala	Pro	Pro	Pro	Gly	Ser
		435					440					445			
Pro	Ala	Lys	Phe	Arg	Ser	Leu	Ser	Arg	Asp	Pro	Glu	Ala	Gly	Arg	Arg
	450					455					460				
Gln	His	Ala	Glu	Glu	Arg	Gly	Arg	Arg	Asn	Pro	Lys	Thr	Gly	Leu	Thr
465					470					475					480
Leu	Glu	Arg	Val	Gly	Pro	Glu	Ser	Ser	Pro	Tyr	Leu	Ser	Arg	Arg	His
				485					490					495	
Arg	Gly	Gln	Gly	Gln	Glu	Gly	Glu	His	Tyr	His	Ser	Cys	Val	Gln	Leu
			500					505					510		
Ala	Pro	Thr	Arg	Gly	Leu	Glu	Glu	Leu	Gly	His	Gly	Pro	Leu	Ser	Leu
		515					520					525			
Ala	Gly	Gly	Pro	Arg	Val	Gly	Gly	Val	Ala	Ala	Ala	Ala	Thr	Glu	Ala
	530					535					540				
Pro	Arg	Met	Glu	Trp	Lys	Val	Lys	Val	Arg	Ser	Asp	G1 y	Thr	Arg	Tyr
545					550					555					560
Val	Ala	Lys	Arg		Val	Arg	Asp	Arg		Leu	Lys	Ala	Arg		Leu
				565		_			570					575	
Lys	He	Arg		Glu	Arg	Ser	Gly		Thr	Thr	Asp	Asp		Ala	Val
	0.1		580		0.1		m	585 T		,	0.1	<i>a</i> 1	590		0.1
Ser	Glu	Met	Lys	Met	Gly	Arg		lrp	Ser	Lys	Glu		Arg	Lys	GIn
	,	595				61	600		,			605	Di	14 .	
HIS		He	Arg	Ala	Arg		GIn	Arg	Lys	Arg		Glu	Phe	мет	Met
C.L	610	Λ	1	C1	C	615	A	C'L.	C1	C1	620	C1	Λ	C	1
	Ser	Arg	Leu	GJU		Leu	Arg	6JU	GIN		ASI	ыу	Asp	ser	
625 Bus	C1.	1	Λ	11.	630	A 1 -	Lavi	C	u÷.	635	1,	The	Mas	1,	640
1.10	oin	Leu	ASII		116	ата	Leu	ser		arg	LyS	ш	are t		LyS
Ara	Acr	lve	Lvc	645	Lou	Acn	Ace	Tro	650	Thr	Tle	Gla	Glu	655 Mot	Lau

660 665 670 Ala His Gly Ala Arg Ser Ala Asp Gly Lys Arg Val Tyr Asn Pro Leu 680 685 Leu Ser Val Thr Thr Val 690 <210> 3179 <211> 110 <212> PRT <213> Homo sapiens <400> 3179 Met Arg Lys Asn Phe Gly Val Arg Ala Glu Leu Cys Glu Gly Leu Leu 1 5 10 15 Gly Trp Gly Ile Ser Ser Tyr Gly Pro His Ala Ile Tyr Leu Leu Leu 25 Glu Arg Gly Asp Phe Glu Trp Val Gly Met Asp Arg Cys Ser Ser Arg 35 40 45 Lys Pro Cys Trp Leu Met Gly Thr Thr Ser Val Tyr Tyr Cys Asp Ser 50 55 Leu Cys Lys Leu Pro Met Trp Pro Arg Thr Pro Leu Leu Pro Gly His 70 75 Phe Leu Pro Pro His Cys Thr Gly Leu Asn His Ser Ala Cys Cys Cys 85 90 95

<210> 3180

<211> 105

<212> PRT

<213> Homo sapiens

100

<400> 3180

Met Glu Phe Gln Thr Leu Leu Gly Thr Glu Gln Asn Phe Glu Asp

Cys Thr Met Leu Gly Cys Gly Arg Ile Gly Lys Gly Phe Cys

. 5 10 15 Ala Leu Ile Leu Ser Ser His Glu Gly Ser Val Gln Glu Gln Val Thr 25 Lys Trp Arg Pro Glu Thr Lys Arg Thr Asn Glu Leu Ser Tyr Arg Asp 40 Leu Leu Ala Leu Leu Pro Leu Phe Thr Thr Arg Arg Gln Thr Ser Leu 55 Ile Phe Lys Lys Leu Leu Phe Asp Leu Ser Glu Ser Gln Pro Arg Asn 70 75 His Gly Cys Met Ile Phe Asp Leu Asp Phe Glu Asp Ser Phe Tyr Lys 85 90 95 Glu Lys Ser Glu Gln Trp Pro Arg Arg 100

<210> 3181

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3181

Met Ser Ser Pro His Lys Asn Ser Val Pro Ser Ser Leu Asn Glu Tyr

1 5 10 15

Glu Val Leu Pro Asn Gly Cys Glu Ala His Trp Glu Val Val Glu Arg 20 25 30

Ile Leu Phe Ile Tyr Ala Lys Leu Asn Pro Gly Ile Ala Tyr Val Gln
35 40 45

Gly Met Asn Glu lle Val Gly Pro Leu Tyr Tyr Thr Phe Ala Thr Asp 50 55 60

Pro Asn Ser Glu Trp Lys Glu His Ala Glu Ala Asp Thr Phe Phe Cys
65 70 75 80

Phe Thr Asn Leu Met Ala Glu lle Arg Asp Asn Phe lle Lys Ser Leu 85 90 95

Asp Asp Ser Gln Cys Gly Ile Thr Tyr Lys Met Glu Lys Val Tyr Ser 100 105 110

Thr Leu Lys Asp Lys Asp Val Glu Leu Tyr Leu Lys Leu Gln Glu Gln

115 120 125 Asn lle Lys Pro Gln Phe Phe Ala Phe Arg Trp Leu Thr Leu Leu Leu 135 140 Ser Gln Glu Phe Leu Leu Pro Asp Val 11e Arg 11e Trp Asp Ser Leu 145 150 155 Phe Ala Asp Asp Asn Arg Phe Asp Phe Leu Leu Val Cys Cys Ala 170 Met Leu Met Leu lle Arg Glu Gln Leu Leu Glu Gly Asp Phe Thr Val 180 190 185 Asn Met Arg Leu Leu Gln Asp Tyr Pro Ile Thr Asp Val Cys Gln Ile 195 200 205 Leu Gln Lys Ala Lys Glu Leu Gln Asp Ser Lys 210 215

<210> 3182

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3182

Met Glu Arg Val lle lle Cys Asp Pro Gly Ser Leu Leu Tyr Asn Tyr 1 5 10 15

Gln Ala Asp Leu Glu Gln lle Thr Leu Leu Ser Leu Val Ser Phe Val
20 25 30

Val Val Leu Phe Leu Phe Leu Arg Trp Ser Phe Ala Leu Val Ala Gln 35 40 45

Ala Gly Val Gln Leu His Asp Leu Ser Ser Pro Gln Pro Pro Pro 50 55 60

Arg Phe Lys Gln Phe Ser Cys Pro Ser Leu Pro Ser Ser Trp Asp Tyr 65 70 75 80

Arg His Ala Pro Pro His Pro Ala Asn Ser Val Phe Leu Val Glu Thr 85 90 95

Gly Phe Leu His Val Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Asp 100 105 110

Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser

His His Ala Arg Pro Ser Pro Val Ser Leu
130 135

<210> 3183

<211> 838

<212> PRT

<213> Homo sapiens

<400> 3183

Met Thr Gly Ala Glu 11e Glu Pro Ser Ala Gln Ala Lys Pro Glu Lys

1 5 10 15

Lys Ala Gly Glu Glu Val IIe Ala Gly Pro Glu Arg Glu Asn Asp Val 20 25 30

Pro Leu Val Val Arg Pro Lys Val Arg Thr Gln Ala Thr Thr Gly Ala
35 40 45

Arg Pro Lys Thr Glu Thr Lys Ser Val Pro Ala Ala Arg Pro Lys Thr 50 55 60

Glu Ala Gln Ala Met Ser Gly Ala Arg Pro Lys Thr Glu Val Gln Val 65 70 75 80

Met Gly Gly Ala Arg Pro Lys Thr Glu Ala Gln Arg Ile Thr Gly Ala 85 90 95

Arg Pro Lys Thr Asp Ala Arg Ala Val Gly Gly Ala Arg Ser Lys Thr 100 105 110

Asp Ala Lys Ala Ile Pro Gly Ala Ar'g Pro Lys Asp Glu Ala Gln Ala 115 120 125

Trp Ala Gln Ser Glu Phe Gly Thr Glu Ala Val Ser Gln Ala Glu Gly
130 135 140

Val Ser Gln Thr Asn Ala Val Ala Trp Pro Leu Ala Thr Ala Glu Ser 145 150 155 160

Gly Ser Val Thr Lys Ser Lys Gly Leu Ser Met Asp Arg Glu Leu Val 165 170 175

Asn Val Asp Ala Glu Thr Phe Pro Gly Thr Gln Gly Gln Lys Gly 11e 180 185 190

Gln Pro Trp Phe Gly Pro Gly Glu Glu Thr Asn Met Gly Ser Trp Cys

		195					200					205			
Tyr	Ser	Arg	Pro	Arg	Ala	Arg	Glu	Glu	Ala	Ser	Asn	Glu	Ser	G1y	Phe
	210					215					220				
Trp	Ser	Ala	Asp	Glu	Thr	Ser	Thr	Ala	Ser	Ser	Phe	Trp	Thr	Gly	Glu
225					230					235					240
Glu	Thr	Ser	Val	Arg	Ser	Trp	Pro	Arg	Glu	Glu	Ser	Asn	Thr	Arg	Ser
				245					250					255	
Arg	His	Arg	Ala	Lys	His	Gln	Thr	Asn	Pro	Arg	Ser	Arg	Pro	Arg	Ser
			260					265					270		
Lys	Gln	Glu	Ala	Tyr	Val	Asp	Ser	Trp	Ser	Gly	Ser	Glu	Asp	Glu	Ala
		275					280					285			
Ser	Asn	Pro	Phe	Ser	Phe	Trp	Val	Gly	Glu	Asn	Thr	Asn	Asn	Leu	Phe
	290					295					300				
Arg	Pro	Arg	Val	Arg	Glu	Glu	Ala	Asn	He	Arg	Ser	Lys	Leu	Arg	Thr
305					310					315					320
Asn	Arg	Glu	Asp	Cys	Phe	Glu	Ser	Glu	Ser	Glu	Asp	Glu	Phe	Tyr	Lys
				325					330					335	
Gln	Ser	Trp	Val	Leu	Pro	Gly	Glu	Glu	Ala	Asn	Ser	Arg	Phe	Arg	His
			340					345					350		
Arg	Asp	Lys	Glu	Asp	Pro	Așn	Thr	Ala	Leu	Lys	Leu	Arg	Ala	Gln	Lys
		355					360					365			
Asp	Val	Asp	Ser	Asp	Arg	Val	Lys	Gln	Glu	Pro	Arg	Phe	Glu	Glu	Glu
	370					375					380				
Val	He	He	Gly	Ser	Trp	Phe	Trp	Ala	Glu	Lys	Glu	Ala	Ser	Leu	Glu
385					390					395					400
Gly	Gly	Ala	Ser	Ala	He	Cys	Glu	Ser	G] u	Pro	Gly	Thr	Glu	Glu	Gly
			÷	405					410					415	
Ala	He	Gly		Ser	Ala	Tyr	Trp		Glu	Glu	Lys	Ser		Leu	G] y
			420					425					430		
Ala	Val		Arg	Glu	Glu	Ala		Pro	Glu	Ser	Glu		Glu	Ala	He
		435	_		_		440				_	445			
Phe		Ser	Trp	Phe	Trp	Asp	Arg	Asp	Glu	Ala		Phe	Asp	Leu	Asn
15	450		., -			455				151	460				0.7
_	Cys	Pro	Val	Tyr		Va]	Ser	Asp	Arg		Arg	Asp	Ala	Ala	
465	1.	Α.	A 1	c	470	Δνα	D	C.	Ti	475	Δ.	C1	W. 1	TI	480
1 - 1 11	1 611	acn	AIO	Sor	>0r	ATO	P/T/C	1. In	Inr	1100	ACD	4 - 1 11	v a i	inr	val

				485					490					495	
Glu	Phe	Lys	Pro	Gly	Leu	Phe	His	Gly	Val	Gly	Phe	Arg	Ser	Thr	Ser
			500					505					510		
Pro	Phe	Gly	He	Pro	Glu	Glu	Ala	Ser	Glu	Met	Leu	Glu	Ala	Lys	Pro
		515					520					525			
Lys	Asn	Leu	G1u	Leu	Ser	Pro	Glu	Gly	Glu	Glu	Gln	Glu	Ser	Leu	Leu
	530					535					540				
Gln	Pro	Asp	Gln	P.ro	Ser	Pro	Glu	Phe	Thr	Phe	Gln	Tyr	Asp	Pro	Ser
545					550					555					560
Tyr	Arg	Ser	Val	Arg	Glu	He	Arg	Glu	His	Leu	Arg	Ala	Arg	Glu	Ser
				565					570					575	
Ala	Glu	Ser	Glu	Ser	Trp	Ser	Cys	Ser	Cys	lle	G1n	Cys	Glu	Leu	Lys
			580					585					590		
11e	Gly	Ser	Glu	Glu	Phe	Glu	Glu	Phe	Leu	Leu	Leu	Met	Asp	Lys	He
		595					600					605			
Arg	Asp	Pro	Phe	He	His	Glu	lle	Ser	Lys	lle	Ala	Met	Gly	Met	Arg
	610					615					620				
Ser	Ala	Ser	Gln	Phe	Thr	Arg	Asp	Phe	He	Arg	Asp	Ser	Gly	Val	Val
625					630					635					640
Ser	Leu	lle	Gly		Leu	Leu	Asn	Tyr		Ser	Ser	Arg	Val	Arg	Thr
				645					650					655	
Ser	Phe	Leu		Asn	Met	lle	His		Ala	Pro	Pro	Tyr		Asn	Leu
			660					665					670		
Asn	Met		Glu	Thr	Phe	He		GIn	Val	Cys	Glu		Thr	Leu	Ala
		675				0.1	680	•	mı	61	7.1	685			
His		Val	Asp	Ser	Leu		GIn	Leu	lhr	61 y		Arg	Met	Leu	Arg
	690	m.		mı	2.7	695	rr.		er i	,	700	. 1		T	
	Leu	Ihr	Met	Ihr		Asp	lyr	HIS	lhr		11e	Ala	Asn	Tyr	
705	C1	Di	,	C .	710		TI.	7°1	A 1 =	715	A 1 -	Δ	ТЬ	1	720
Ser	GIY	Pne	Leu		Leu	Leu	ınr	inr		Asn	Ala	Arg	ınr	Lys	rne
117.	V - 1	I	1	725	1	1	A	1	730	Cl.,	Aon	Dage	110	735	410
nis	val	Leu		Jon	Leu	reu	nsn		ser	oru	ASII	1.1.0	750	Va]	ита
1	1	Last	740	Co.	۸1 <i></i>	1,,,,	Λ1-	745	Sam.	11.	Dha	Vol.		1	Dha
LyS	LyS	755	rne	ser	MIS	LyS	760	Leu	ser.	116	1116	765	OIY	Leu	тие
		100					100								

Asn Ile Glu Glu Thr Asn Asp Asn Ile Gln Ile Val Ile Lys Met Phe Gln Asn Ile Ser Asn Ile Ile Lys Ser Gly Lys Met Ser Leu Ile Asp Asp Asp Phe Ser Leu Glu Pro Leu Ile Ser Ala Phe Arg Glu Phe Glu Glu Leu Ala Lys Gln Leu Gln Ala Gln 11e Asp Asn Gln Asn Asp Pro Glu Val Gly Gln Gln Ser

<210> 3184

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3184

Met Lys Gln Thr Arg Ser Ile Gln Lys Leu Pro Ala Asn Lys Lys Cys Gln Ile Ser Val His His Lys Ser Lys Tyr Pro Trp Val Ser Ile Asn Phe Asn Lys Gln Asn lle Phe Gly Ser Val Leu Phe Asp Met Asp Leu Gln Arg Ser Leu Pro Asn His Phe Phe Leu Ser Leu Cys Glu Met Ser Val Lys Glu Lys 11e Gly Glu Trp Trp Ser His Tyr Trp I1e I1e Ser lle lle Leu Tyr Lys Lys Asp Lys Leu Phe Asp lle Gln Asp Met Tyr Ser Ala Gln Arg His Gln Phe Gly Gly Glu Leu Met Thr Leu Ser Pro

He Phe

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<211> 294
<212> PRT
<213> Homo sapiens
<400> 3185
Met Leu Arg Gln Val Leu Arg Arg Gly Leu Gln Ser Phe Cys His Arg
                                     10
Leu Gly Leu Cys Val Ser Arg His Pro Val Phe Phe Leu Thr Val Pro
             20
                                 25
Ala Val Leu Thr Ile Thr Phe Glv Leu Ser Ala Leu Asn Arg Phe Gln
         35
                             40
                                                  45
Pro Glu Gly Asp Leu Glu Arg Leu Val Ala Pro Ser His Ser Leu Ala
     50
                         55
                                              60
Lys Ile Glu Arg Ser Leu Ala Ser Ser Leu Phe Pro Leu Asp Gln Ser
                     70
                                          75
Lys Ser Gln Leu Tyr Ser Asp Leu His Thr Pro Gly Arg Tyr Gly Arg
                                      90
                 85
Val 11e Leu Leu Ser Pro Thr Gly Asp Asn 11e Leu Leu Gln Ala Glu
            100
                                105
                                                     110
Gly 11e Leu Gln Thr His Arg Ala Val Leu Glu Met Lys Asp Gly Arg
                            120
                                                 125
Asn Ser Phe 11e Gly His Gln Leu Gly Gly Val Val Glu Val Pro Asn
    130
                        135
                                             140
Ser Lys Asp Gln Arg Val Lys Ser Ala Arg Ala Ile Gln Ile Thr Tyr
                                        155
                    150
Tyr Leu Gln Thr Tyr Gly Ser Ala Thr Gln Asp Leu Ile Gly Glu Lys
                165
                                     170
                                                         175
Trp Glu Asn Glu Phe Cys Lys Leu lle Arg Lys Leu Gln Glu Glu His
            180
                                 185
                                                     190
Gln Glu Leu Gln Leu Tyr Ser Leu Ala Ser Phe Ser Leu Trp Arg Asp
                            200
                                                 205
Phe His Lys Thr Ser IIe Leu Ala Arg Ser Lys Val Leu Val Ser Leu
    210
                        215
                                             220
```

Val Leu Ile Leu Thr Thr Ala Thr Leu Ser Ser Met Lys Asp Cys

225 230 235 240 Leu Arg Ser Lys Pro Phe Leu Gly Leu Leu Gly Val Leu Thr Val Cys 245 250 Ile Ser Ile Ile Thr Ala Ala Gly Ile Phe Phe Ile Thr Asp Gly Lys 260 265 270 Tyr Asn Ser Thr Leu Leu Gly Ile Pro Phe Phe Ala Met Gly lle Ser 280 285 Thr Glu Phe Thr Ser Ser 290 <210> 3186 <211> 102 <212> PRT <213> Homo sapiens <400> 3186 Met Ser Val Thr Met Ser Phe Leu Ile Cys Ala Pro Gly Glu Gly Gly 5 Cys Gly Glu Asp Pro Val Cys Arg His Cys Val Pro Trp Gln Ser Arg 20 25 Gly Ala Pro Cys Gly Trp Pro Ala Lys Val Tyr Val Pro Leu Arg Ala 40 45 Glu Gly Lys Arg Gln Pro Arg Ser Cys Ala Ser Arg His Leu Met Gly 50 55 60 His Val Ser Gln 11e Cys Lys Ser Lys 11e Leu Ala Ser Tyr Leu Leu 70 75 Cys Arg Ile Asn Asn Phe Asn Asn Gly Asn Trp Val Met Asp Gly 85 90 95 Thr Ala Ala Ile Arg Leu 100

<210> 3187

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3187

Met Pro Ser Trp Arg Leu Ser Leu Phe 11e 11e Gly Ser His Ser Leu 1

5 10 15

Val Gly Tyr Leu Cys Asp Leu Ala Ser Asp Val Pro Gly Gln Arg Pro 25

Pro Trp Leu Gln Pro Arg Arg Arg Thr Arg Ser Arg Val Gly Trp Ser 35

Gly Ser Trp Glu Glu Arg Val Ser Ala Cys Pro Gly Thr Pro Ser Ser 55

Arg Glu Asp Thr Glu Ala Arg Thr Pro Leu Gly Phe Pro Gly Lys Trp 70 75

Arg Arg Ser Val Leu Gly Arg Ser Ser Glu Leu Ile Pro Pro Arg Ile 85 90 95

Gly Ala Gly Leu

100

<210> 3188

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3188

Met Gly Asn Phe Trp Lys Gly Arg Gln Pro Phe Leu Lys Phe Gln Asn 10

Glu Lys Asp Val 11e Leu IIe Leu Thr Gly Ser Leu Phe 11e Phe Leu

25 30 Lys Lys Glu Ser Phe Leu Leu Ser His Phe Gln Leu Phe Phe Ser Leu

40 45

Leu Phe Phe Phe Ser Phe Leu Ser Pro Leu Leu Leu Phe Leu Phe Pro 55 60

Ser Pro Pro Pro Phe Phe Phe Phe Tyr Cys Ser Leu Gln Ser Arg Ala 65 70 75

Thr Pro 11e Gly Ser Val Thr Lys Val Thr Pro Ser Ser His Phe Cys

Pro Asp Phe Phe Ser Leu Phe Gln Ala Val Arg Leu Ser Cys Cys Leu Cys Ser Trp Ala Ile Ile Pro Ser Phe Ala Tyr Cys Arg Leu <210> 3189 <211> 162 <212> PRT <213> Homo sapiens <400> 3189 Met Ser Lys Arg Leu Gln Ala Ala Ser Glu lle Gln Pro Gly Asn Cys Pro Gly Ser Ser Val Leu Pro Gly Met Glu Gly Pro Leu 11e Lys Pro Ser Thr Pro Arg Leu Pro Pro Thr Leu Asp Arg Asp His His Tyr Leu Gly Leu Asp Ala Gly Gly Thr Thr Ser Cys Pro Asn Ala Val Ala Trp Ala Gln Ala Pro Gln Ala Leu Gly Pro Arg His Val Asp Lys Ala Thr His His Ile Cys Gly Trp Leu Glu Ala Ala Leu Gly Pro Ser Cys Asp Pro Gln Pro Trp Arg Ser Gly Cys Pro His Thr Trp Gly Ser Val Leu Ser His Pro Met Pro Ala Ala Pro Cys Phe Trp Arg Ser Ser Pro Ser Pro Pro Val Ser Ala Met Ser Pro Cys His Pro Val Gln Ala Met Pro Phe Leu Gly Ser Ser Cys Pro Met Pro Glu Ala Arg Pro Phe Ser Trp

Phe Thr

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<210> 3190
<211> 680
<212> PRT
<213> Homo sapiens
<400> 3190
Met Gly Cys Gly Thr Lys Glu Pro Lys Ile Thr Gln Leu Cys Leu Ala
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                                     10
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                                                          15
Ala Ile Gln Arg Leu Met Ser His Glu Val Val Ser Glu Thr Ala Ala
                                 25
             20
Gly Asn Ile Ile Asn Met Leu Trp Gln Leu Met Glu Asn Ser Leu Glu
                             40
                                                 45
Glu Leu Lvs Leu Gln Thr Val Leu Val Leu Leu Thr Thr Asn Thr
     50
                         55
Val Val His Asp Glu Ala Leu Ser Lys Ala Ile Val Leu Cys Phe Arg
                     70
                                         75
Leu His Phe Thr Lys Asp Asn Ile Thr Asn Asn Thr Ala Ala Ala Thr
                 85
                                     90
Val Arg Gln Val Val Thr Val Val Phe Glu Arg Met Val Ala Glu Asp
                                105
Glu Arg His Arg Asp lle Ile Glu Gln Pro Val Leu Val Gln Gly Asn
                            120
                                                125
Ser Asn Arg Arg Ser Val Ser Thr Leu Lys Pro Cys Ala Lys Asp Ala
    130
                        135
Tyr Met Leu Phe Gln Asp Leu Cys Gln Leu Val Asn Ala Asp Ala Pro
                    150
                                        155
Tyr Trp Leu Val Gly Met Thr Glu Met Thr Arg Thr Phe Gly Leu Glu
                165
                                    170
Leu Leu Glu Ser Val Leu Asn Asp Phe Pro Gln Val Phe Leu Gln His
Gln Glu Phe Ser Phe Leu Leu Lys Glu Arg Val Cys Pro Leu Val 11e
        195
                            200
                                                205
Lys Leu Phe Ser Pro Asn Ile Lys Phe Arg Gln Gly Ser Ser Thr Ser
```

215

Ser Ser Pro Ala Pro Val Glu Lys Pro Tyr Phe Pro Ile Cys Met Arg

220

225					230					235					240
Leu	Leu	Arg	Val	Val	Ser	Val	Leu	Ile	Lys	Gln	Phe	Tyr	Ser	Leu	Leu
				245					250					255	
Val	Thr	Glu	Cys	Glu	He	Phe	Leu	Ser	Leu	Leu	Val	Lys	Phe	Leu	Asp
			260					265					270		
Ala	Asp	Lys	Pro	Gln	Trp	Leu	Arg	Ala	Val	Ala	Val	Glu	Ser	He	His
		275					280					285			
Arg	Phe	Arg	Val	Gln	Pro	Gln	Leu	Leu	Arg	Ser	Phe	Cys	Gln	Ser	Tyr
	290					295					300				
Asp	Met	Lys	Gln	His	Ser	Thr	Lys	Val	Phe	Arg	Asp	Ile	Val	Asn	Ala
305					310					315					320
Leu	Gly	Ser	Phe	Ile	Gln	Ser	Leu	Phe	Leu	Val	Pro	Pro	Thr	Gly	Asn
				325					330					335	
Pro	Ala	Thr	Ser	Asn	Gln	Ala	Gly	Asn	Asn	Asn	Leu	Gly	Gly	Ser	Val
			340					345					350		
Ser	Ala	Pro	Ala	Asn	Ser	Gly	Met	Va]	Gly	lle	Gly	Gly	Gly	Val	Thr
		355					360					365			
Leu	Leu	Pro	Ala	Phe	Glu	Tyr	Arg	Gly	Thr	Trp	He	Pro	lle	Leu	Thr
	370					375					380				
He	Thr	Val	Gln	Gly	Ser	Ala	Lys	Ala	Thr	Tyr	Leu	Glu	Met	Leu	Asp
385					390					395					400
Lys	Val	Glu	Pro	Pro	Thr	lle	Pro	Glu	Gly	Tyr	Ala	Met	Ser	Val	Ala
				405					410					415	
Phe	His	Cys	Leu	Leu	Asp	Leu	Val	Arg	Gly	He	Thr	Ser	Met	He	Glu
			420					425					430		
Gly	Glu	Leu	Gly	Glu	Leu	Glu	Thr	Glu	Cys	Gln	Thr	Thr	Thr	Glu	Glu
		435					440					445			
Gly	Ser	Ser	Pro	Thr	Gln	Ser	Thr	Glu	Gln	Gln	Asp	Leu	Gln	Ser	Thr
	450					455					460				
Ser	Asp	Gln	Met	Asp	Lys	Glu	He	Val	Ser	Arg	Ala	Va1	Trp	Glu	Glu
465					470					475					480
Met	Val	Asn	Ala	Cys	Trp	Cys	Gly	Leu	Leu	Ala	Ala	Leu	Ser	Leu	Leu
				485					490					495	
Leu	Asp	Ala	Ser	Thr	Asp	Glu	Ala	Ala	Thr	Glu	Asn	lle	Leu	Lys	Ala
			500					505					510		
Glu	Leu	Thr	Met	Ala	Ala	Leu	Cys	Gly	Arg	Leu	Gly	Leu	Val	Thr	Ser

		515					520					525			
Arg	Asp	Ala	Phe	Ile	Thr	Ala	Ile	Cys	Lys	Gly	Ser	Leu	Pro	Pro	His
	530					535					540				
Tyr	Ala	Leu	Thr	Val	Leu	Asn	Thr	Thr	Thr	Ala	Ala	Thr	Leu	Ser	Asn
545					550					555					560
Lys	Ser	Tyr	Ser	Val	Gln	Gly	Gln	Ser	Val	Met	Met	lle	Ser	Pro	Ser
				565					570					575	
Ser	Glu	Ser	His	Gln	Gln	Val	Val	Ala	Val	Gly	Gln	Pro	Leu	Ala	Val
			580					585					590		
Gln	Pro	Gln	Gly	Thr	Val	Met	Leu	Thr	Ser	Lys	Asn	Ile	Gln	Cys	Met
		595					600					605			
Arg	Thr	Leu	Leu	Asn	Leu	Ala	His	Cys	His	Gly	Ala	Val	Leu	Gly	Thr
	610					615					620				
Ser	Trp	Gln	Leu	Val	Leu	Ala	Thr	Leu	Gln	His	Leu	Va1	Trp	Пе	Leu
625					630					635					640
Gly	Leu	Lys	Pro	Ser	Ser	Gly	Gly	Ala	Leu	Lys	Pro	Gly	Arg	Ala	Val
				645					650					655	
Glu	Gly	Pro	Ser	Thr	Va]	Pro	Phe	Lys	Asp	Phe	Met	Gln	Pro	Pro	Ala
			660					665					670		
Ser	Arg	Val	Gln	Asn	Gly	Glu	Ser								
		675					680								

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3191

Val Ala Leu Ala Pro Leu Glu Glu Cys Gly Leu Gln Leu Cys Ile Leu Leu Leu Gln Leu Ala His Leu Leu Gln Val Val Gly Gln Ala Val Ile Gln Glu Leu His Gly Leu Leu Leu Met Ala Ile Gln Gly Val Phe Ala Val Gly Pro Thr Asp Ser Asp Val Ala Gly Asn Val Thr Gly Pro Trp Gln Gly Thr Ser Ser Val Thr Gly Trp Gly Gln Thr Glu Ala Gly Ala Ala Gln Gly Ser Arg Pro His Thr Asp Ser Val Gly Val Cys His Val Gly Gln Glu Ala His Gly Gly Ser Ile Gly Leu Cys His Arg Leu Ala Pro Asn Ile Asp Arg Arg Asp Lys Asp Ile Ser Cys Ser Arg Ser His Gly Ala Thr Gln Arg Ala

<210> 3192

<211> 225

<212> PRT

<213> Homo sapiens

<400> 3192

 Met
 Ala
 Thr
 Phe
 Ile
 Gly
 Ala
 Ala
 Val
 Ser
 Asn
 Ser
 Arg
 Gly
 Thr

 1
 5
 5
 10
 10
 15
 15

 Ala
 Pro
 Cys
 Gly
 Thr
 Gly
 Leu
 Pro
 Pro
 Arg
 Gln
 His
 Ala
 Gln
 Ser
 Ser
 Ser

 20
 25
 25
 25
 30
 30
 30
 45
 16
 Thr

 Ser
 Ser
 Gly
 Val
 Ile
 Leu
 Ser
 Ser
 Tyr
 Leu
 Tyr
 Pro
 Leu
 Leu
 Ile
 Thr

 Cys
 Lys
 Leu
 Arg
 Gly
 Arg
 Leu
 Phe
 Arg
 Ile
 Phe
 Tyr
 Phe
 Tyr
 Thr
 Lys
 Asp
 Asp

 Cys
 Lys
 Leu
 Arg
 Gly
 Arg
 Leu
 Phe
 Arg
 Ile
 Phe
 Tyr
 Thr
 Tyr
 Thr
 Lys
 Asp
 Asp

Thr Ser Arg Pro Leu Pro Trp Lys Gly Val Val Thr Phe Arg Cys Cys

His His Cys Gly Lys Leu Thr Trp Cys Cys Trp Val Cys Leu Met Glu Arg Cys Phe His Cys Phe Pro Val His Leu Val Phe Asn Leu Val Gln Ser Phe Ser Pro Thr Ser Gly Val Glu Ser Cys Leu Leu Pro Gln Cys Asp Lys Cys Trp Pro Met Val Tyr Arg Ser Cys Asp Ala Ser Arg Gly Leu Val Asn Ala Cys Ile Leu Gly Phe Val Leu Leu Glu Cys Ser Phe Val Gly Ala Leu Asn Asn Tyr Val Arg Ser Leu Ala Thr Leu Leu Glu Arg Thr His Gly Gly Lys Arg Leu Lys Leu Cys Glu Glu Ser Gln Ala Ser His Pro Ser Phe Ser Ala Glu Pro Arg His Gln Pro Thr Cys Gln Leu Asn Ala Thr Val Arg Val Ile Thr Ser Lys Ile Thr Arg Lys Thr Thr <210> 3193 <211> 590 <212> PRT <213> Homo sapiens <400> 3193 Met Ala Thr Pro Arg Gly Arg Thr Lys Lys Lys Ala Ser Phe Asp His

Ser Pro Asp Ser Leu Pro Leu Arg Ser Ser Gly Arg Gln Ala Lys Lys

Lys Ala Thr Glu Thr Thr Asp Glu Asp Glu Asp Gly Gly Ser Glu Lys

Lys Tyr Arg Lys Cys Glu Lys Ala Gly Cys Thr Ala Thr Cys Pro Val

	50					55					60				
Cys	Phe	Ala	Ser	Ala	Ser	Glu	Arg	Cys	Ala	Lys	Asn	Gly	Tyr	Thr	Ser
65					70					75					80
Arg	Trp	Tyr	His	Leu	Ser	Cys	Gly	Glu	His	Phe	Cys	Asn	Glu	Cys	Phe
				85					90					95	
Asp	His	Tyr	Tyr	Arg	Ser	His	Lys	Asp	Gly	Tyr	Asp	Lys	Tyr	Thr	Thr
			100					105					110		
Trp	Lys	Lys	Ile	Trp	Thr	Ser	Asn	Gly	Lys	Thr	Glu	Pro	Ser	Pro	Lys
		115					120					125			
Ala	Phe	Met	Ala	Asp	Gln	Gln	Leu	Pro	Tyr	Trp	Val	Gln	Cys	Thr	Lys
	130					135					140				
Pro	Glu	Cys	Arg	Lys	Trp	Arg	Gln	Leu	Thir	Lys	Glu	He	Gln	Leu	Thr
145					150					155					160
Pro	Gln	He	Ala	Lys	Thr	Tyr	Arg	Cys	Gly	Met	Lys	Pro	Asn	Thr	Ala
				165					170					175	
He	Lys	Pro	Glu	Thr	Ser	Asp	His	Cys	Ser	Leu	Pro	Glu	Asp	Leu	Glu
			180					185					190		
Ala	Leu	Thr	Pro	Gln	Lys	Cys	Ile	Pro	His	He	He	Val	Arg	Gly	Leu
		195	٠				200					205			
Val	Arg	lle	Arg	Cys	Val	Gln	Glu	Val	Glu	Arg	lle	Leu	Tyr	Phe	Met
	210					215					220				
Thr	Arg	Lys	Gly	Leu	lle	Asn	Thr	Gly	Val	Leu	Ser	Val	Gly	Ala	Asp
225					230					235					240
Gln	Tyr	Leu	Leu	Pro	Lys	Asp	Tyr	His	Asn	Lys	Ser	Val	He	lle	He
				245					250					255	
Gly	Ala	Gly		Ala	Gly	Leu	Ala		Ala	Arg	Gln	Leu		Asn	Phe
			260					265					270		
Gly	He		Val	Thr	Val	Leu		Ala	Lys	Asp	Arg		Gly	Gly	Arg
		275			_		280					285			
Val		Asp	Asp	Lys	Ser	•	Lys	Gly	Val	Thr		GTy	Arg	Gly	Ala
0.1	290			0.1	0	295			5		300			0	0.1
	116	Vai	Asn	Gly		11e	Asn	Asn	Pro		Ala	Leu	Met	Cys	
305	17 - 7	C -	A 7	Δ	310	т.	Δ.		4	315	Di	Di	A 1	C 1	320
ыn	val	ser	Ala	Arg	ser	ırp	Asp	H1S		Glu	rne	rne	Ala		rne
Ala	C1	Acr	шіс	325 Thr	Lou	Lou	The	Dno	330	Tun	San	Vol	11.	335	C1
aid	UIV	(151)	11.5	1111	1.000	1.1	1111	1 (1)	UIV	1 4 1	Je: F	v a i	T 1 G,	1 1 1-1	()

			340					345					350		
Lys	Leu	Ala	Glu	Gly	Leu	Asp	He	Gln	Leu	Lys	Ser	Pro	Val	Gln	Cys
		355					360					365			
He	Asp	Tyr	Ser	Gly	Asp	Glu	Val	Gln	Val	Thr	Thr	Thr	Asp	Gly	Thr
	370					375					380				
Gly	Tyr	Ser	Ala	Gln	Lys	Val	Leu	Val	Thr	Val	Pro	Leu	Ala	Leu	Leu
385					390					395					400
Gln	Lys	Gly	Ala	lle	Gln	Phe	Asn	Pro	Pro	Leu	Ser	Glu	Lys	Lys	Met
				405					410					415	
Lys	Ala	Thr	Asn	Ser	Leu	Gly	Ala	Gly	Ile	Ile	Glu	Lys	He	Ala	Leu
			420					425					430		
Gln	Phe	Pro	Tyr	Arg	Phe	Trp	Asp	Ser	Lys	Val	Gln	Gly	Ala	Asp	Phe
		435					440					445			
Phe	Gly	His	Val	Pro	Pro	Ser	Ala	Ser	Lys	Arg	Gly	Leu	Phe	Ala	Val
	450					455					460				
Phe	Tyr	Asp	Met	Asp	Pro	Gln	Lys	Lys	His	Ser	Val	Leu	Met	Ser	Val
465					470					475					480
lle	Ala	Gly	Glu	Ala	Val	Ala	Ser	Val	Arg	Thr	Leu	Asp	Asp	Lys	Gln
				485					490					495	
Val	Leu	Gln	Gln	Cys	Met	Ala	Thr	Leu	Arg	Glu	Leu	Phe	Lys	Glu	Gln
			500					505					510		
Glu	Val	Pro	Asp	Pro	Thr	Lys	Tyr	Phe	Val	Thr	Arg	Trp	Ser	Thr	Asp
		515					520					525			
Pro	Trp	He	Gln	Met	Ala	Tyr	Ser	Phe	Val	Lys	Thr	Gly	Gly	Ser	Gly
	530					535					540				
Glu	Ala	Tyr	Asp	lle	lle	Ala	Glu	Asp	lle	Gln	Gly	Thr	Val	Phe	Phe
545					550					555					560
Ala	Gly	G1u	Ala	Thr	Asn	Arg	His	Phe	Pro	Gln	Thr	Va]	Thr	Gly	Ala
				565				•	570					575	
Tyr	Leu	Ser	Gly	Val	Arg	Glu	Ala	Ser	Lys	He	Ala	Ala	Phe		
			580					585					590		

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3194

Met Thr Arg Thr Pro Val Gly Ser Ala Arg Thr Arg Pro Lys Pro Arg 10 Lys Leu Gly Pro Gln Arg Gly Lys Ala Leu Gln Ala Ser Ser Arg Leu 25 Ser Glu Ser Pro Ala Leu Val Lys Lys Arg Met Pro Asp Ala Cys Thr 35 40 45 Leu Gly Arg Ala Gly Ile Gly Leu Pro Lys Met Cys Leu His Met Ala 55 60 Val Arg His Ser Lys Ala Gln Lys Thr Gly Pro Gly Ile Leu Gln Gln 70 75 Arg Gln Lys Pro Pro Ala Pro Arg Ala Ser Gly Gly Pro Ala Leu Leu 85 90 95 Gly Lys Arg Arg Gly Cys Ser Glu Ala Gly Ser Ala Ser Leu Glu Pro 105 Leu Ser Ser Arg Ala Ala Ala Gly Cys Leu Asn Gln Val Pro Leu 115 120 125 Ser Pro Phe Leu Ala Gly Pro Arg Asn Thr Arg Arg Leu Pro Ala Pro 135 140 Glu Arg Glu Arg Ile Glu Leu Ala Ala Thr Leu Cys Leu Glu Gly Trp 150 155 160 Pro Leu Arg Cys Leu Ala Ser Lys Gly Lys Leu His Cys Val Tyr 165 170 175

<210> 3195

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3195

Met Arg Pro Asp Asp Ile Asn Pro Arg Thr Gly Leu Val Val Ala Leu 5 10 15 Val Ser Val Phe Leu Val Phe Gly Phe Met Phe Thr Val Ser Gly Met

			20					25					30		
Lys	Gly	Glu	Thr	Leu	Gly	Asn	lle	Pro	Leu	Leu	Ala	He	Gly	Pro	Ala
		35					40					45			
He	Cys	Leu	Pro	Gly	He	Ala	Ala	He	Ala	Leu	Ala	Arg	Lys	Thr	Glu
	50					55					60				
Gly	Cys	Thr	Lys	Arg	Pro	Glu	Asn	Glu	Leu	Leu	Trp	Val	Arg	Lys	Leu
65					70					75					80
Pro	Cys	Phe	Arg	Lys	Pro	Lys	Asp	Lys	Glu	Val	Val	Glu	Leu	Leu	Arg
				85					90					95	
Thr	Pro	Ser	Asp	Leu	Glu	Ser	Gly	Lys	Gly	Ser	Ser	Asp	Glu	Leu	Ala
			100					105					110		
Lys	Lys	Ala	Gly	Leu	Arg	Gly	Lys	Pro	Pro	Pro	Gln	Ser	Gln	Gly	Glu
		115					120					125			
Val	Ser	Val	Ala	Ser	Ser	He	Asn	Ser	Pro	Thr	Pro	Thr	Glu	Glu	Gly
	130					135					140				
Glu	Cys	Gln	Ser	Leu	Val	Gln	Asn	Gly	His	Gln	Glu	Glu	Thr	Ser	Arg
145					150					155					160
Tyr	Leu	Asp	Gly	Tyr	Cys	Pro	Ser	Gly	Ser	Ser	Leu	Thr	Tyr	Ser	Ala
				165					170					175	
Leu	Asp	Val	Lys	Cys	Ser	Ala	Arg	Asp	Arg	Ser	Glu	Cys	Pro	Glu	Pro
			180					185					190		
Glu	Asp	Ser	lle	Phe	Phe	Val	Pro	Gln	Asp	Ser	He	He	Va]	Cys	Ser
		195					200					205			
Tyr	Lys	Gln	Asn	Ser	Pro	Tyr	Asp	Arg	Tyr	Cys	Cys	Tyr	He	Asn	Gln
	210					215					220				
lle	Gln	Gly	Arg	Trp	Asp	His	G1 u	Thr	He	Val					
225					230					235					

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3196

Met Tyr Trp Gln Asn Trp Thr His Asn Gly Arg Phe Trp Gly Ala Gly

Val His Leu Tyr Leu Ser Arg Lys Gln Cys Ala Leu Lys Asn Thr Ser Leu Ser Lys Phe Gln Thr Ser His 11e Cys Lys Gly Ser Ala Leu Gln Pro Gln Gln Ala Ser Pro Gly Ala Ser Ser Phe Leu Thr Cys Ser Glu Leu Gly Val Met Tyr Leu Lys Leu Val Leu Gly Gln Met Val Gln Ala Val Arg Arg Asp Ser Gly Leu Gln Pro Phe Gly Ser Leu Phe Leu Leu lle Thr Gln Lys Arg Ala Val Leu Thr Pro Phe Leu Thr Lys Thr Trp His Ser Leu Arg Ala Leu Val Tyr Arg Val Trp Ser Leu Glu Glu Ser Arg Tyr Leu Gln Arg Glu Lys Gly Leu Val Asp Ser Phe Gly Val Leu Trp Glu Glu <210> 3197 <211> 200 <212> PRT <213> Homo sapiens <400> 3197 Met Ala Gly Trp Gly Ser Tyr Ser Val Thr Ala Thr Pro Phe Thr Ala Val 11e Met Ser Met Leu Ser Thr Ser Leu Glu Ser Leu Val Leu Ser Ser Val Leu Ile Arg Phe Met Ala Leu Asn Pro Arg Ser Gln Gln Glu Val Glu Met Gly Thr Gln Thr Thr Ala Met Ser Leu Leu Ser Arg

Gly Lys Arg Gln Cys Trp Ala Arg Ala Phe Leu Gln Ser Met Glu Asn

Gly Arg Cys Trp Ala Met Val Phe Arg Pro Ser His Ser Ser Ser Arg Ala Ser Ser Leu Tyr Pro Val Gly Arg Glu His Ser Lys Tyr Leu Ala Arg Leu Arg Met Ser Ser Phe Pro Lys Leu Ala Ser Ser Ile Pro Leu Gly Gln Ala Met Val Ser Asn Thr Ser Met Phe Phe Ser Cys Gly Gly Arg Ser Ala Ser Asn Leu Cys Trp Arg Tyr Ser Ile Pro Val Arg Thr Val Leu Ser Leu Ser Ala Trp Asn Arg Cys Ser Ala Thr Ser Ser Leu Ser Lys Gln Met Pro Trp Ser Arg Pro Ser Leu Lys Leu Ala Leu Asn Ser Ser Ser Leu Gly Pro Ala Trp

<210> 3198

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3198

Phe Val lle Gly Ser Asn Leu Thr Leu Val Cys Leu Ala Tyr Ser His

				85					90					95	
Leu	Leu	Ala	Gln	Tyr	Thr	Trp	Ser	Phe	Ser	Gly	Val	Thr	Thr	Trp	Glu
			100					105					110		
Gly	Gln	Thr	Leu	Phe	Met	Pro	Ser	Leu	Ser	Arg	Ala	His	Ser	Gly	Val
		115					120					125			
Tyr	Thr	Cys	Lys	Ala	Ser	Asn	Ser	Leu	Ser	Gly	Leu	His	Ser	Ser	Met
	130					135					140				
Asp	Thr	lle	Ile	Thr	Val	Ser	Glu	Thr	Leu	Pro	Gln	Pro	Asn	Val	Thr
145					150					155					160
Ala	Ser	Asn	Leu	Ala	Pro	Val	Glu	His	Val	Asp	Ser	Ile	Ser	Leu	His
				165					170					175	
Cys	Leu	Pro	Pro	Arg	Ser	Thr	Val	Ala	He	Arg	Arg	Asp	Val	Asn	Gly
			180					185					190		
Gln	Lys	Leu	Phe	He	Gly	Gly	His	Arg	Glu	Leu	Ser	Leu	Asp	Cys	Arg
		195					200					205			
Thr	Leu	Thr	Leu	Ser	Asn	He	Thr	Arg	Asn	Asp	Thr	Gly	Val	Tyr	Gln
	210					215					220				
Cys	Glu	Ser	Trp	Asn	Ser	Ala	Thr	Ser	Ser	He	Ser	Asn	Pro	Thr	Leu
225					230					235					240
Ile	Lys	Val	Thr	Tyr	Gly	Pro	Asp	Pro	Pro	Met	Val	Asn	Pro	Pro	Asp
				245					250					255	
Pro	Glu	Val	Thr	Ala	Gly	Ala	Ala	Leu	Thr	Leu	Ser	Cys	Phe	Ala	Asp
			260					265					270		
Ser	Asn	Pro	Pro	Ala	Gln	Tyr	His	Trp	Glu	Met	Asp	Arg	Arg	Pro	G1 y
		275					280					285			
Pro	Ala	Thr	Gln	His	Leu	Val	Пе	Ser	Glu	Val	Thr	Leu	Asp	G1n	
	290					295					300				

<211> 585

<212> PRT

<213> Homo sapiens

<400> 3199

Met Glu Met Arg Leu Pro 11e Arg Ser Pro 11e Lys Arg Asp Phe Leu

1				5					10					15	
Ser	Gly	He	Gln	He	Glu	Phe	Lys	G1n	Ser	Ser	His	Gln	Arg	Ser	Leu
			20					25					30		
Arg	Ala	Arg	Leu	Tyr	Trp	Leu	Gln	Val	Asp	Asn	Gln	Leu	Pro	Gly	Ala
		35					40					45			
Met	Phe	Pro	Val	Val	Phe	His	Pro	Val	Ala	Pro	Pro	Lys	Ser	He	Ala
	50					55					60				
Leu	Asp	Ser	Glu	Pro	Lys	Pro	Phe	Πe	Asp	Val	Ser	Val	He	Thr	Arg
65					70					75					80
Phe	Asn	Glu	Tyr	Ser	Lys	Val	Leu	Gln	Phe	Lys	Tyr	Phe	Met	Val	Leu
				85					90					95	
lle	Gln	Glu	Met	Ala	Leu	Lys	lle	Asp	Gln	G1 y	Phe	Leu	G]y	Ala	lle
			100					105					110		
He	Ala	Leu	Phe	Thr	Pro	Thr	Thr	Asp	Pro	Glu	Ala	Glu	Arg	Arg	Arg
		115					120					125			
Thr		Leu	lle	Gln	Gln	Asp	He	Asp	Ala	Leu		Ala	Glu	Leu	Met
	130					135					140				
	Thr	Ser	Met	Thr		Met	Ser	lle	Leu		Phe	Phe	Glu	His	
145					150	_		_		155			0.1		160
His	He	Ser	Pro		Lys	Leu	His	Leu		Leu	Ser	Leu	Gly		Gly
0.1	0.1	0.1		165		0.1		6.1	170		EN		17. 1	175	C
GTy	Glu	Glu		Asp	Lys	61u	Lys		Glu	мет	Pne	ЛІа	Val	HIS	Ser
V. I	A	1	180	1	1	C	11.	185	A 1	Tl	1	Tlan	190	Ve.1	Aan
val	Asn		Leu	Leu	Lys	261		GIY	ATA	HIII	ren	205	Asp	vai	ASP
A on	Lau	195	Dho	Lve	Lou	Ala	200 Tur	Tyr	Clu	116	Ara		Gln	Pho	Tyr
ASP	210		rne	LyS	Leu	215		1 9 1	Olu	116	220		OIII	THE	1 y 1
Lve			Gln	Lou	ماآ			Val	Val	Ara			Ser	Glu	Gln
225	m g	пэр	OIII	Lea	230	пр	001	, 01	, (1)	235	,,,,,	1,1	oc,	014	240
	Len	Lvs	Gln	Met		Val	Leu	Val	Leu		Leu	Asp	Val	Leu	
	200		0	245	• , •		200		250					255	
Asn	Pro	Phe	Glv		He	Arg	Gly	Leu		Glu	Gly	Va1	Glu		Leu
			260			Ü	•	265					270		
Phe	Tyr	Glu		Phe	Gln	Gly	Ala		Gln	Gly	Pro	Glu	Glu	Phe	Ala
	-	275				-	280					285			
Clu	C1v		Vel	Ha	Clv	Vo.1		Cor	Lau	Pho	Clv	Hie	The	Val	61 v

	290					295					300				
G1 y	Ala	Ala	Gly	Val	Val	Ser	Arg	He	Thr	Gly	Ser	Val	Gly	Lys	Gly
305					310					315					320
Leu	Ala	Ala	Ile	Thr	Met	Asp.	Lys	Glu	Tyr	G1n	Gln	Lys	Arg	Arg	Glu
				325					330					335	
Glu	Leu	Ser	Arg	Gln	Pro	Arg	Asp	Phe	Gly	Asp	Ser	Leu	Ala	Arg	Gly
			340					345					350		
Gly	Lys	Gly	Phe	Leu	Arg	Gly	Val	Val	G1 y	Gly	Val	Thr	G1 y	He	Пe
		355					360					365			
Thr	Lys	Pro	Val	Glu	Gly	Ala	Lys	Lys	Glu	Gly	Ala	Ala	Gly	Phe	Phe
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Lys	Gly	Ile	Gly	Lys	Gly	Leu	Val	Gly	Ala	Val	Ala	Arg	Pro	Thr	Gly
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Gly	He	Val	Asp	Met	Ala	Ser	Ser	Thr	Phe	Gln	Gly	He	G1n	Arg	Ala
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Ala	Glu	Ser	Thr	Glu	Glu	Val	Ser	Ser	Leu	Arg	Pro	Pro	Arg	Leu	11e
			420					425					430		
His	Glu	Asp	Gly	Ile	Ile	Arg	Pro	Tyr	Asp	Arg	Gln	Glu	Ser	Glu	Gly
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Arg	Tyr	His	Cys	Ala	He	Pro	Gly	Ser	Lys	Lys	Thr	He	Leu	Met	Val
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Thr	Asn	Arg	Arg	Val	Leu	Cys	Пe	Lys	Glu	Val	Glu	He	Leu	Gly	Leu
				485					490					495	
Met	Cys	Val	Asp	Trp	Gln	Cys	Pro	Phe	Glu	Asp	Phe	Val	Phe	Pro	Pro
			500					505					510		
Ser	Val		Glu	Asn	Val	Leu		He	Ser	Val	Lys		G1n	Gly	Leu
		515					520					525			
Phe		Lys	Lys	Asp	Ser		Asn	Gln	Gly	Cys		Arg	Lys	Val	Tyr
	530					535					540				
	Lys	Asp	Thr	Ala			Glu	Arg	Ala		Asn	Ala	He	Glu	
545					550					555	•	0.7			560
Ala	Gln	Ser	Thr		GIn	G1n	Gln	Lys		Met	Lys	Gln	Ser		Val
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Arg	Leu	Leu	Arg	Pro	GIn	Leu	Pro	Ser							

580 585

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	210					215					220				
Gln	Ala	Thr	Ser	Ala	Leu	Gln	Gln	Glu	Glu	Thr	Ser	Glu	Lys	Lys	Ser
225					230					235					240
Arg	Lys	Val	Val	lle	Arg	Glu	Lys	Ala	Glu	Arg	Leu	Ser	Leu	Arg	Lys
				245					250					255	
Thr	Leu	Glu	Glu	Thr	Glu	Thr	Tyr	His	Ala	Lys	Leu	Asn	Glu	Asp	His
			260					265					270		
Leu	Leu	His	Ala	Pro	Glu	Phe	He	11e	Lys	Pro	Arg	Ser	His	Thr	Va]
		275					280					285			
Trp	Glu	Lys	Glu	Asn	Val	Lys	Leu	His	Cys	Ser	He	Ala	Gly	Trp	Pro
	290					295					300				
Glu	Pro	Arg	Val	Thr	Trp	Tyr	Lys	Asn	Gln	Val	Pro	lle	Asn	Val	His
305					310					315					320
Ala	Asn	Pro	Gly	Lys	Tyr	11e	lle	Glu	Ser	Arg	Tyr	Gly	Met	His	Thr
				325					330			•		335	
Leu	Glu	Ile	Asn	Ala	Cys	Asp	Phe	Glu	Asp	Thr	Ala	Gln	Tyr	Arg	Ala
			340					345					350		
Ser	Ala	Met	Asn	Val	Lys	Gly	Glu	Leu	Ser	Ala	Tyr	Ala	Ser	Val	Va]
		355					360					365			
Val	Lys	Arg	Tyr	Lys	Gly	Glu	Phe	Asp	Glu	Thr	Arg	Phe	His	Ala	Gly
	370					375					380				
Ala	Ser	Thr	Met	Pro	Leu	Ser	Phe	Gly	Val	Thr	Pro	Tyr	Gly	Tyr	Ala
385					390					395					400
Ser	Arg	Phe	Glu	He	His	Phe	Asp	Asp	Lys	Phe	Asp	Val	Ser	Phe	Gly
				405					410					415	
Arg	Glu	Gly	Glu	Thr	Met	Ser	Leu	Gly	Cys	Arg	Val	Val	He	Thr	Pro
			420					425					430		
Glu	lle	Lys	His	Phe	Gln	Pro	Glu	Įle	Gln	Trp	Tyr	Arg	Asn	Gly	Val
		435					440					445			
Pro	Leu	Ser	Pro	Ser	Lys	Trp	Val	Gln	Thr	Leu	Trp	Ser	Gly	Glu	Arg
	450					455					460				
Ala	Thr	Leu	Thr	Phe	Ser	His	Leu	Asn	Lys	Glu	Asp	Glu	Gly	Leu	Tyr
465					470					475					480
Thr	11e	Arg	Val	Arg	Met	Gly	Glu	Tyr	Tyr	G] u	Gln	Tyr	Ser	Ala	Tyr
				485					490					495	
Val	Phe	Val	Arg	Asp	Ala	Asp	Ala	Glu	He	${\sf Glu}$	Gly	Ala	Pro	Ala	Ala

			500					505					510		
Pro	Leu	Asp	Val	Lys	Cys	Leu	Glu	Ala	Asn	Lys	Asp	Tyr	Ile	He	He
		515					520					525			
Ser	Trp	Lys	Gln	Pro	Ala	Val	Asp	Gly	Gly	Ser	Pro	He	Leu	G]y	Tyr
	530					535					540				
Phe	He	Asp	Lys	Cys	Glu	Val	Gly	Thr	Asp	Ser	Trp	Ser	Gln	Cys	Asn
545					550					555					560
Asp	Thr	Pro	Val	Lys	Phe	Ala	Arg	Phe	Pro	Val	Thr	Gly	Leu	Пe	Glu
				565					570					575	
Gly	Arg	Ser	Tyr	He	Phe	Arg	Val	Arg	Ala	Val	Asn	Lys	Met	Gly	He
			580					585					590		
Gly	Phe		Ser	Arg	Val	Ser	Glu	Pro	Val	Ala	Ala		Asp	Pro	Ala
		595					600					605			
Glu		Ala	Arg	Leu	Lys		Arg	Pro	Ser	Ala	Pro	Trp	Thr	Gly	Gln
	610					615					620				_
	lle	Val	Thr	Glu		Glu	Pro	Ser	Glu		He	Val	Pro	G1 y	
625	mı				630	m.	0.1	. 1	mı.	635		m	., .	., .	640
Pro	Thr	Asp	Leu		Val	Thr	Glu	Ala		Arg	Ser	lyr	Val		Leu
C	т		D	645 D	C1	C1		C1	650	C1	C1	7.1	M .	655 T	D)
Ser	Irp	Lys		Pro	GIY	GIn	Arg		HIS	GIU	GIY	11e	Met	ıyr	Pne
Vo.1	C1	1	660	C1	A 1 o	C1	Tha	665	Aan	Tann	Cln	A 111 cm	670	Aan	Tha
vai	Glu	675	Cys	Giu	на	GIY	680	Giu	ASII	пр	GIII	685	Va]	NSII	1111
Glu	Lou		Val	Lve	Sor	Pro		Pho	Ala	Lou	Pho		Leu	Ala	Glu
Olu	690	110	vai	Lys	361	695	ni g	THE	Ма	Leu	700	nsp	Leu	AIG	oru
G1v		Ser	Tyr	Cvs	Phe		Val	Arø	Cvs	Ser		Ser	Ala	Glv	Val
705	Lys	001	•,.	0,0					0,0	715				017	720
	Glu	Pro	Ser	Glu					Thr	Val	Val	Glv	Asp	Lvs	
,				725					730					735	
Asp	He	Pro	Lys		Pro	Gly	Lys	He	Ile	Pro	Ser	Arg	Asn	Thr	Asp
·			740			-	•	745					750		
Thr	Ser	Va]	Val	Val	Ser	Trp	Glu	Glu	Ser	Lys	Asp	Ala	Lys	Glu	Leu
		755					760					765			
Val	Gly	Tyr	Tyr	lle	Glu	Ala	Ser	Val	Ala	Gly	Ser	G1 y	Lys	Trp	Glu
	770					775					780				
Pro	Cvs	Asn	Asn	Asn	Pro	Val	Lvs	Glv	Ser	Arg	Phe	Thr	Cvs	His	G1 v

785					790					795					800
Leu	Val	Thr	Gly	Gln	Ser	Tyr	He	Phe	Arg	Val	Arg	Ala	Val	Asn	Ala
				805					810					815	
Ala	Gly	Leu	Ser	Glu	Tyr	Ser	Gln	Asp	Ser	Glu	Ala	lle	Glu	Val	Lys
			820					825					830		
Ala	Ala	lle	Gly	Gly	Gly	Val	Ser	Pro	Asp	Val	Cys	Pro	Ala	Leu	Ser
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Asp	Glu		Glv	Glv	Leu	Thr		Ser	Arg	Glv	Arg	Val	His	Glu	Ala
•	850		•	•		855				•	860				
Ser		Pro	Thr	Phe	Gln		Asp	Ala	Leu	Leu	Glv	Ser	Lvs	Pro	Asn
865					870	_, -				875	3				880
	Pro	Ser	Leu	Pro		Ser	Ser	Gln	Asn		Glv	Gln	Thr	Glu	
2,0	•••	50.	1504	885	001	501	501	·	890	200	0. ,	· · · ·		895	
Ser	lvs	Val	Ser		Thr	Val	Gln	Glu		Leu	Thr	Pro	Pro	Pro	Gln
001	13,0		900	0,4		,	0111	905	014	1500			910		0111
lvs	Ala	Ala		Gln	Glv	lvs	Ser		Ser	Asn	Pro	Leu		Lys	lvs
Lys	ni a	915	110	0111	01)	Lys	920	2,5	001	пор	110	925	2,5	Lyo	Буб
Thr	Asn		Ala	Pro	Pro	Ser		Pro	Cvs	Asn	He		Cvs	Leu	Glu
1113	930	111 6	nia	110	110	935	110	110	Oy 3	пор	940	1111	0,3	Dea	Old
Ser		Arg	Asn	Ser	Met		Len	G1 v	Trn	lve		Pro	Asn	Lys	Thr
945	THE	мв	пэр	561	950	141	Lea	019	11 p	955	OIII	110	пор	L,S	960
	Gly	Δla	Glu	116		Glv	Tyr	Tur	Val		Tyr	Ara	Glu	Val	
01,	Ory	MIG	oru	965	1111	Oly	.,1	. , ,	970	11511	1 , 1	6	Giu	975	110
Asn	Glv	Val	Pro		lve	Trn	Arg	Glu		Asn	Val	Lve	Ala	Val	Ser
пэр	01,	101	980	Oly	Lyo	пр	Мg	985	MIG	non	, 41	Lys	990	, (1)	501
Glu	Glu	Ala		lve	ماآ	Ser	Asn		lve	Glu	Aen	Met		Tyr	Gln
oru	Glu	995	1 9 1	Lys	116		1000	261	Lys	O1u		1005	141	1 3 1	OIII
Pho	Gln		Δla	Δla	Met			Δla	Glv	Lou			Pro	Ser	Δla
	1010	101	MIG	MIG		1015	Met	Mid	01 y		1020	MIG	110	561	MIG
		Glu	Cvs	Pho			Glu	Glu	Trn			Ala	Val	Pro	G1 v
1025		Olu	Cys		1030	Cys	O1 u	014		1035	110	MIG	101		1040
		Hic	Sor			Cvs	Sor	Glu			lve	Asn	Ser	Leu	
110	110	1112		1045	Lys	Cys	261		1050	шg	rys	пэр		1055	141
Leu	Gla	Tro			Pro	Val	Ніс			Ara	Thr	Pro		Thr	G1 _v
Leu	0111		1060	110	110	101		3e1 1065	Oly	шg	1.11.1		1070	1 1 1 1	Gry
Tyr	Pho			Lou	Luc	Glu			Δ1 o	lve	Glu			Trp	Ara
1 7 1	1 116	val	лър	ren	Lys	oru	nia	LyS	nid	r 3.2	oru	ush	0.111	$-i \tau b$	U1 B

1075		1080	3	1085
Gly Leu Asn Glu	ı Ala Ala I	lle Lys Asn	Val Tyr Leu	Lys Val Arg Gly
1090	10)95	1100	
Leu Lys Glu Gly	v Val Ser T	Tyr Val Phe	Arg Val Arg	Ala Ile Asn Gln
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Ala Gly Val Gly	Lys Pro S	Ser Asp Leu	Ala Gly Pro	Val Val Ala Glu
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Thr Arg Pro Gly	Thr Lys G	Glu Val Val	Val Asn Val	Asp Asp Asp Gly
1140)	1145		1150
Val Ile Ser Lei	ı Asn Phe G	Glu Cys Asp	Lys Met Thr	Pro Lys Ser Glu
1155		1160		1165
Phe Ser Trp Ser	Lys Asp T	Γyr Val Ser	Thr Glu Asp	Ser Pro Arg Leu
1170	11	175	1180	•
Glu Val Glu Sei	Lys Gly A	Asn Lys Thr	Lys Met Thr	Phe Lys Asp Leu
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Gly Met Asp Asj	Leu Gly 1	lle Tyr Ser	Cys Asp Val	Thr Asp Thr Asp
	1205		1210	1215
Gly Ile Ala Se	Ser Tyr L	Leu Ile Asp	Glu Glu Glu	Leu Lys Arg Leu
1220)	1225		1230
Leu Ala Leu Se	His Glu F	lis Lys Phe	Pro Thr Val	Pro Val Lys Ser
1235		1240		1245
Glu Leu Ala Va	Glu Ile L	Leu Glu Lys	Gly Gln Val	Arg Phe Trp Met
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Gln Ala Glu Lys	s Leu Ser (Gly Asn Ala	Lys Val Asn	Tyr lle Phe Asn
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Glu Lys Glu 11	e Phe Glu C	Gly Pro Lys	Tyr Lys Met	His lle Asp Arg
	1285		1290	1295
Asn Thr Gly Ile	e lle Glu M	Met Phe Met	Glu Lys Leu	Gln Asp Glu Asp
1300)	1305		1310
Glu Gly Thr Ty	Thr Phe C	Gln Leu Gln	Asp Gly Lys	Ala Thr Asn His
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Ser Thr Val Va	l Leu Val (Gly Asp Val	Phe Lys Lys	Leu Gln Lys Glu
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Ala Glu Phe Gl	n Arg Gln (Glu Trp Ile	Arg Lys Gln	Gly Pro His Phe
1345	1350		1355	1360

Val G	lu	Tyr	Leu	Ser	Trp	Glu	Val	Thr	Gly	Glu	Cys	Asn	Val	Leu	Leu
]	1365					1370					1375	
Lys C	ys	Lys	Val	Ala	Asn	Ile	Lys	Lys	Glu	Thr	His	He	Val	Trp	Tyr
		J	1380					1385					1390		
Lys A	sp	Glu	Arg	Glu	He	Ser	Val	Asp	Glu	Lys	His	Asp	Phe	Lys	Asp
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Gly I	le	Cys	Thr	Leu	Leu	lle	Thr	Glu	Phe	Ser	Lys	Lys	Asp	Ala	Gly
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Ile T	yr	Glu	Val	Ile	Leu	Lys	Asp	Asp	Arg	Gly	Lys	Asp	Lys	Ser	Arg
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Leu L	ys	Leu	Val	Asp	Glu	Ala	Phe	Lys	Glu	Leu	Met	Met	Glu	Val	Cys
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Lys L	.ys	Пe	Ala	Leu	Ser	Ala	Thr	Asp	Leu	Lys	Пе	Gln	Ser	Thr	Alа
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Glu G	lу	lle	Gln	Leu	Tyr	Ser	Phe	Val	Thr	Tyr	Tyr	Val	Glu	Asp	Leu
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Lys V	al	Asn	Trp	Ser	His	Asn	Gly	Ser	Ala	He	Arg	Tyr	Ser	Asp	Arg
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Val L	ys.	Thr	Gly	Val	Thr	Gły	Glu	Gln	Ile	Trp	Leu	Gln	Ile	Asn	Glu
1505					1510					1515					1520
Pro T	hr	Pro	Asn	Asp	Lys	Gly	Lys	Tyr	Val	Met	Glu	Leu	Phe	Asp	Gly
				1525					1530					1535	
Lys T	hr	Gly	His	Gln	Lys	Thr	Val	Asp	Leu	Ser	Gly	GIn	Ala	Tyr	Asp
			1540					1545					1550		
Glu A	la	Tyr	Ala	Glu	Phe			Leu	Lys	G1n	Ala	Ala	lle	Ala	G] u
		555					1560					1565			
Lys A		Arg	Ala	Arg			Gly	Gly	Leu			Val	Val	Thr	He
	70					1575					1580				_
Gln G	lu	Gly	Lys			Asn	Leu	Thr			Val	Trp	Gly		
1585					1590		_			1595					1600
Pro P	ro	Glu			Trp	Leu	Lys			Lys	Ala	Leu			Asp
61 11				1605		101	0.1		1610		m,			1615	
Gly H	is			Leu	Lys	Phe			Gly	Arg	Thr			Phe	Thr
			1620	C	m.i			1625	0.1		Tr.		1630	., .	., -
lle A			Val	Ser	Thr			Ser	Gly	Lys			Leu	Val	Val
	1	635					1640					1645			

 Lys Asn Lys Tyr Gly Ser Glu Thr Ser Asp Phe Thr Val Ser Val Phe

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 1655
 1660

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 1665
 1670
 1675
 1680

 Gly Lys Lys Ala Lys
 1685

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<211> 1309

<212> PRT

<213> Homo sapiens

<400> 3201

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Met Arg Phe His Arg Val Asp Gln Ala Gly Leu Glu Leu Leu Thr Ser

20 25 30

Gly Asn Ser Pro Ala Ser Ala Ser Arg Ser Ala Glu Ile Thr Val Val

Gly Asn Ser Pro Ala Ser Ala Ser Arg Ser Ala Glu lle Inr val val

35 40 45

Ser Gln His Ala Gln Pro Gly Phe Leu Tyr Gln Trp Leu Glu Ala Asp 50 55 60

Arg His Gly Lys Ser Gln Gly Ala Ala Asn Thr Thr Ser Gly Glu Asn
65 70 75 80

Phe Asp Gln Ser Pro Leu Lys Arg Thr Phe Lys Ser Lys Val Leu Ala 85 90 95

His Tyr Pro Gln Asn Ile Glu Trp Asn Pro Phe Asp Gln Asp Ala Val 100 105 110

Asn Met Leu Cys Met Pro Lys Gly Leu Ser Phe Arg Thr Gln Thr Asp 115 120 125

Asn Lys Asp Pro Gln Phe His Ser Phe Ile lle Thr Arg Glu Asp Gly
130 135 140

Ser Arg Thr Tyr Gly Phe Val Leu Thr Phe Tyr Glu Glu Val Thr Ser 145 150 155 160

Lys Gln 11e Cys Thr Ala Met Gln Thr Leu Tyr Gln Met His As
n Ala 165 170 175

Glu	His	Tyr		Ser	Val	Tyr	Ala		Ser	Ser	Cys	Ser		Asp	Ser
			180					185					190		
Leu	Ala	Ser 195	Ser	Leu	Asp	Glu	Gly 200	Asp	Thr	Thr	Ser	Leu 205	Leu	Lys	Leu
Gln		Tyr	Asn	Ser	Tyr		Ile	Ser	Arg	Asp	Thr	Leu	Tyr	Val	Ser
	210		_	_		215	_		_		220				
Lys 225	Ser	He	Cys	Leu	11e 230	Thr	Pro	Leu	Pro	235	Met	GIn	Ala	Cys	Lys 240
Lys	Phe	Leu	Ile		Leu	Tyr	Lys	Ala		Thr	Ser	G1n	Gln		Pro
				245					250					255	
Pro	Leu	Pro	Leu 260	Glu	Ser	Tyr	He	His 265	Asn	He	Leu	Tyr	61u 270	Val	Pro
Lou	Dro	Pro		Clv	Ara	Sor	Lou		Pho	Tur	Gly	Val		Clu	Pro
Leu	110	275	110	Uly		361	280	БУЗ	THE	1 9 1	O1 y	285	1 9 1	Oju	110
Val	He	Cys	Gln	Arg	Pro	Gly	Pro	Ser	Glu	Leu	Pro	Leu	Ser	Asp	Tyr
	290					295					300				
Pro		Ara	Glu	Ala	Phe		len	Leu	G1 v	Leu	Glu	Asn	Len	Val	Gln
305	LCu	πь	O, u	MIG	310	Olu	LCG	LCu	O1 y	315	Olu	non	Lea	, aı	320
	Phe	Thr	Cvs	Val		Leu	Glu	Met	Gln		Leu	Len	Tyr	Ser	
, 01	1110		0,5	325	Bea	Leu	014	MC C	330	110	Lea	Lea	.,,	335	0111
Asp	Tyr	Gln	Arg	Leu	Met	Thr	Val	Ala	Glu	Gly	He	Thr	Thr	Leu	Leu
			340					345					350		
Phe	Pro	Phe	Gln	Trp	Gln	His	Val	Tyr	Va]	Pro	He	Leu	Pro	Ala	Ser
	•	355					360					365			
Leu	Leu	llis	Phe	Leu	Asp	Ala	Pro	Val	Pro	Tyr	Leu	Met	Gly	Leu	Gln
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Ser	Lys	Glu	Gly	Thr	Asp	Arg	Ser	Lys	Leu	Glu	Leu	Pro	Gln	Glu	Ala
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Asn	Leu	Cys	Phe	Val	Asp	lle	Asp	Asn	His	Phe	He	Glu	Leu	Pro	Glu
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Glu	Val	Leu	Val	Gln	Phe	Gly	He	Pro	Pro	Glu	Gly	Ser	Leu	His	Cys
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Ser	Glu	Ser	Thr	Ser	Lys	Leu	Lys	Asn	Met	Val	Leu	Lys	Asp	Leu	Val

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Glu	Leu	Leu	Lys	Gly	Asn	Glu	Thr	He	Ala	Arg	Leu	Gln	Ala	Leu	Ala
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Lys	Arg	Thr	Gly	Val	Ala	Val	Glu	Lys	Met	Asp	Leu	Ser	Ala	Ser	Leu
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Gln	Asp	Met	Glu	Ser	Trp	Leu	Thr	Asn	Arg	Glu	Gln	Met	Gln	Asn	Phe
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Asp	Lys	Ala	Ser	Phe	Leu	Ser	Asp	Gln	Pro	Glu	Pro	Tyr	Leu	Pro	Phe
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Leu	Ser	Arg	Phe	Ile	Glu	Thr	Gln	Met	Phe	Ala	Thr	Phe	lle	Asp	Asn
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Lys		Met	Ser	Gln	Trp	Glu	Glu	Lys	Asp	Pro		Leu	Arg	Val	Phe
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	Thr	Arg	lle	Asp		lle	Arg	Leu	Tyr		Val	Arg	Ala	Pro	
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Leu	Arg	Thr	Ser		Tyr	Gln	Lys	Cys		Thr	Leu	Lys	Glu		Ala
C1	c	7.1	C I	645				1	650 M		31.2	TI.	41.	655	112.
GIn	Ser	11e		GIn	Arg	Leu	мет		мет	Asp	HIS	Inr		11e	H1S
D	11.5 ~	1	660	A = 10	Mat	1	Tla	665	C1 5	C1	Lva	T	670	Cln	C1.,
PFO	піѕ	675	Leu	ASP	Met	Lys	680	Gry	GIH	GIY	Lys	685	01u	OIH	GIY
Dho	Dho		Lvc	Lou	Gln	Ser		Vo.I	Lou	Ala	The		Pro	Thr	Sor
ine	690	110	rys	Leu	0111	695	nsp	vai	Leu	піа	700	Oly	110	1111	261
Aen		Ara	Trn	Val	Sor	Arg	Ser	Ala	Thr	Ala		Ara	Ara	Lve	Glu
705	ASII	AI g	пр	* (1.1	710		501	MIG	1111	715	0111	мв	m 8	Lyo	720
	Len	Arø	Gln	His		Glu	His	Val	Glv		Asp	Asn	Asp	Leu	
6		8	~ 111	725	~~.	O I U			730					735	6
Glo	lve	Tvr	Met		Glu	Ala	Arg	Ser		Glv	lve	Asp	Leu		Gln

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Pro	Lys	Leu	Ser	Asp	Leu	Ser	Pro	Ala	Val	He	Ala	G]n	Thr	Λsn	Cys
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Lys	Phe	Val	Glu	Gly	Leu	Leu	Lys	Glu	Cys	Arg	Met	Lys	Thr	Lys	Arg
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Met	Leu	Val	Glu	Lys	Met	Gly	His	Glu	Ala	Val	Glu	Leu	Gly	His	Gly
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Glu	Ala	Asn	lle	Thr	Gly	Leu	Glu	Glu	Asn	Thr	Leu	He	Ala	Ser	Leu
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Cys	Asp	Leu	Leu	Glu	Arg	Ile	Trp	Ser	His	Gly	Leu	Gln	Val	Lys	Gln
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Arg	Arg	Lys	Ser	Asp	Ser	Gly	Val	Met	Leu	Pro	Thr	Leu	Arg	Val	Ser
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Leu	lle	Gln	Asp	Met	Arg	His	Ile	Gln	Asn	Met	Ser	Glu	Ile	Lys	Thr
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Asp	Val	G1 y	Arg	Ala	Arg	Ala	Trp	Ile	Arg	Leu	Ser	Leu	Glu	Lys	Lys
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Leu	Leu	Ser	Gln	His	Leu	Lys	Gln	Leu	Leu	Ser	Asn	Gln	Pro	Leu	Thr
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Lys	Lys	Leu	Tyr	Lys	Arg	Tyr	Ala	Phe	Leu	Arg	Cys	Glu	Glu	Glu	Arg
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Cys	Phe	Thr	Ser		Phe	Thr	Thr	He	Met	He	Pro	Tyr	Arg		Val
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He	He	Pro	He	Lys	Lys	Leu	Ser		Ala	He	lle	Thr	Ser	Asn	Pro
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Trp	He		Val	Ser	G1 y	Glu		Gly	Asp	Thr			Met	G1n	He
		995					1000					1005			
		Asn	Leu	Leu		Met	Thr	Phe	Glu			Asn	Leu	Gly	Lys
	1010	77.1	,	6.		1015					1020	,	,		,
Len	lhr	Linn	Val	(.ln	Lla	G1v	Hic	Asn	Acn	Ser	LIV	Len	Len	Ala	LVC

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Trp	Leu	Val	Asp	Cys	Val	Met	Val	Arg	Asn	Glu	He	Thr	Gly	His	Thr
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Tyr	Arg	Phe	Pro	Cys	Gly	Arg	Trp	Leu	Gly	Lys	Gly	lle	Asp	Asp	Gly
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Ser	Leu	Glu	Arg	He	Leu	11e	Gly	Glu	Leu	Met	Thr	Ser	Ala	Ser	Asp
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Glu	Лsp	Leu	Val	Lys	Gln	Cys	Arg	Thr	Pro	Pro	Gln	Gln	Lys	Ser	Pro
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Thr	Thr	Ala	Arg	Arg	Leu	Ser	lle	Thr	Ser	Leu	Thr	Gly	Lys	Asn	Asn
1109	5				1110					1115					1120
Lys	Pro	Asn	Ala	Gly	Gln	He	Gln	Glu	Gly	He	Gly	Glu	Ala	Val	Asn
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Asn	He	Val	Lys	His	Phe	His	Lys	Pro	Glu	Lys	Glu	Arg	Gly	Ser	Leu
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Thr	Val	Leu	Leu	Cys	Gly	Glu	Asn	Gly	Leu	Val	Ala	Ala	Leu	G] u	Gln
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Val	Phe	His	His	Gly	Phe	Lys	Ser	Ala	Arg	lle	Phe	His	Lys	Asn	Val
	1170					1175					1180				
Phe	lle	Trp	Asp	Phe	lle	Glu	Lys	Val	Val	Ala	Tyr	Phe	Glu	Thr	Thr
118	5				1190					1195					1200
Asp	G1n	He	Leu	Asp	Asn	Glu	Asp	Asp	Val	Leu	He	Gln	Lys	Ser	Ser
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Cys	Lys			Cys	His	Tyr	Val	Asn	Ala	He	Asn			Pro	Arg
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Asn			Lys	Asp	G] y			Gln	He	Leu			Leu	Gly	Thr
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	1250					1255	0.1				1260				
		lhr	Arg		Tyr	Glu	Glu	Ser			Leu	Arg	Asp		
126			a		1270					1275	7. 7	0.3			1280
lhr	Val	Asn			11e	Arg	He			Ihr	.lle	GIn			lhr
11	12. 1	,		1285	c	,	11		1290	W . 1	A	17 3		1295	
He	vai			61 y	Ser	Leu		-	ыу	val	Asp	val			
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Pro Asp Thr Leu Tyr Arg Phe Gln Leu Ala Ala Arg Ser Asp Met Gly
                                                 45
                             40
Val Gly Val Phe Thr Pro Thr 11e Glu Ala Arg Thr Ala Gln Ser Met
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                                             60
                         55
Pro Ser Gly Pro Pro Arg Lys Val Glu Val Glu Pro Leu Asn Ser Thr
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                                         75
Ala Val His Val Tyr Trp Lys Leu Pro Val Pro Ser Lys Gln His Gly
                                     90
                 85
Gln Ile Arg Gly Tyr Gln Val Thr Tyr Val Arg Leu Glu Asn Gly Glu
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Pro Arg Gly Leu Pro lle Ile Gln Asp Val Met Leu Ala Glu Ala Gln
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                                                125
Glu Thr Thr Ile Ser Gly Leu Thr Pro Glu Thr Thr Tyr Ser Val Thr
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                                            140
Val Ala Ala Tyr Thr Thr Lys Gly Asp Gly Ala Arg Ser Lys Pro Lys
                    150
                                        155
lle Val Thr Thr Gly Ala Val Pro Gly Arg Pro Thr Met Met Ile
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                                    170
Ser Thr Thr Ala Met Asn Thr Ala Leu Leu Gln Trp His Pro Pro Lys
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Glu Leu Pro Gly Glu Leu Leu Gly Tyr Arg Leu Gln Tyr Cys Arg Ala
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Asp Glu Ala Arg Pro Asn Thr 11e Asp Phe Gly Lys Asp Asp Gln His
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215

Phe Thr Val Thr Gly Leu His Lys Gly Thr Thr Tyr Ile Phe Arg Leu

210

225					230					235					240
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Arg	Thr	Pro	Glu	Asp	Leu	Pro	Ser	Gly	Phe	Pro	Gln	Asn	Leu	His	Val
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Thr	G1y	Leu	Thr	Thr	Ser	Thr	Thr	Glu	Leu	Ala	Trp	Asp	Pro	Pro	Val
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Leu	Ala	Glu	Arg	Asn	Gly	Arg	He	He	Ser	Tyr	Thr	Val	Val	Phe	Arg
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Asp	He	Asn	Ser	Gln	Gln	Glu	Leu	Gln	Asn	He	Thr	Thr	Asp	Thr	Arg
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Phe	Thr	Leu	Thr	Gly	Leu	Lys	Pro	Asp	Thr	Thr	Tyr	Asp	Пе	Lys	Val
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Arg	Ala	Trp	Thr	Ser	Lys	Gly	Ser	Gly	Pro	Leu	Ser	Pro	Ser	Пе	Gln
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Ser	Arg	Thr	Met	Pro	Val	Glu	G1n	Val	Phe	Ala	Lys	Asn	Phe	Arg	Val
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Ala	Ala	Ala	Met	Lys	Thr	Ser	Val	Leu	Leu	Ser	Trp	Glu	Val	Pro	Asp
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Ser	Tyr	Lys	Ser	Ala	Val	Pro	Phe	Lys	He	Leu	Tyr	Asn	Gly	G1n	Ser
385					390					395					400
Val	Glu	Val	Asp	Gly	His	Ser	Met	Arg	Lys	Leu	He	Ala	Asp	Leu	Gln
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Pro	Asn	Thr		Tyr	Ser	Phe	Va]		Met	Asn	Arg	Gly		Ser	Ala
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Pro		Lys	Pro	Leu	Pro		Ser	Ala	lyr	116		Asp	Gly	Arg	Phe
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	Leu	Ser	Met	Pro	His	Val	GIn	Asp	Pro		Leu	val	Arg	Trp	
465	11	17 1	V . 1	17 . 1	470	11	Δ	Α	V . 1	475	C1	C	N - 4	1	480
lyr	He	va1	vaj		Pro	11e	Asp	Arg		Gly	GIŸ	ser	мет		Inr
D	Λ.,	т	C	485	D	C1	C1	٠	490	Levi	A	C1	l a s	495	C1
rro	Arg	тр		ınr	Pro	GJU	OIU	Leu 505	ыш	ren	ASP	GIU	510	Leu	oju
Δla	110	Glas	500	Glv	Gly	Clu	Glu		Arc	Ara	Ara	Ara		Gla	A10

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Pro	Leu	Ser	Pro	Asp	Leu	Ser	Tyr	Gln	Cys	Phe	Val	Leu	Ala	Ser	Leu
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Lys	Glu	Pro	Met	Asp	Gln	Lys	Arg	Tyr	Ala	Ser	Ser	Pro	Tyr	Ser	Asp
			580					585					590		
Glu	lle	Val	Val	Gln	Val	Thr	Pro	Ala	Gln	Gln	Gln	Glu	Glu	Pro	Glu
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Met	Leu	Trp	Val	Thr	Gly	Pro	Val	Leu	Ala	Val	He	Leu	lle	11e	Leu
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He	Val	Ile	Ala	lle	Leu	Leu	Phe	Lys	Arg	Lys	Arg	Thr	His	Ser	Pro
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Ser	Ser	Lys	Gly	Glu	Gln	Ser	11e	G1 y	Leu	Lys	Asp	Ser	Leu	Leu	Ala
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His	Ser	Ser	Asp	Pro	Val	Glu	Met		Arg	Leu	Asn	Tyr	Gln	Thr	Pro
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Gly	Ser		Val	Pro	Ser	Cys		Asn	Thr	Ser	Ser		Arg	Asp	His
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Pro		lle	Pro	lle	Thr		Leu	Ala	Asp	Asn		Glu	Arg	Leu	Lys
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	Asn	Asp	GIy	Leu	Lys	Phe	Ser	GIn	Glu		Glu	Ser.	He	Asp	
705	61	61	DI	TI	710	C1		c		715	C1	v 1		1	720
GIy	GIn	GIn	Phe		Trp	Glu	Asn	Ser		Leu	Glu	val	Asn		Pro
Lua	Aon	Ana	Tyrn	725	Aan	V o 1	11.	110	730	Aon	Цia	Con	Ana	735	11.
Lys	ASII	AIg	740	мта	Asn	vai	116	745	1 y 1	Asp	111.5	261	750	vai	116
Lou	Thr	Sor		Acn	Gly	Val	Pro		Sor	Acn	Tyr	ماا		Ala	Aen
Leu	1 111	755	116	ләр	Gly	vai	760	Oly	261	пър	1 3 1	765	пап	ATA	изп
Tyr	Πe		Glv	Tyr	Arg	Lvs		Asn	Ala	Tvr	He		Thr	Gln	Glv
1) .	770	пор	Ory	131	<i>m</i> 8	775	0111	71011	,,,,,	1,1	780	711 6		0111	0.13
Pro		Pro	Glu	Thr	Met		Asp	Phe	Trp	Arg		Val	Tro	Glu	Gln
785			-, -		790	~ * ;			12	795		*	12		800
	Thr	Ala	Thr	Val	Val	Met	Met	Thr	Arg		Glu	Glu	Lys	Ser	

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Val	Lys	Cys	Asp	Gln	Tyr	Trp	Pro	Ala	Arg	Gly	Thr	Glu	Thr	Cys	Gly
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Leu	He	Gln	Val	Thr	Leu	Leu	Asp	Thæ	Val	Glu	Leu	Ala	Thr	Tyr	Thr
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Tyr	Pro	Thr	Pro	Ile	Leu	Ala	Phe	Leu	Arg	Arg	Val	Lys	Ala	Cys	Asn
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Pro	Leu	Asp	Ala	Gly	Pro	Met	Val	Va]	His	Cys	Ser	Ala	Gly	Val	Gly
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Arg	Thr	Gly	Cys	Phe	He	Val	11e	Asp	Ala	Met	Leu	G] u	Arg	Met	Lys
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His	Glu	Lys	Thr	Val	Asp	11e	Tyr	Gly	His	Val	Thr	Cys	Met	Arg	Ser
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G1n	Arg	Asn	Tyr	Met	Val	Gln	Thr	Glu	Asp		Tyr	Va]	Phe	He	
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Glu	Ala	Leu	Leu		Ala	Ala	Thr	Cys		His	Thr	Glu	Va]		Ala
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0.1			980			6.1		985	151	,		,	990	C	c
Glu	Ser		Ihr	Ala	Met			61u	Phe	Lys			Ala	Ser	Ser
	4.7	995	TI	C			1000	C	A T .	Α.		1005	C	Δ	t
	_		Inr	ser	Arg							Pro	cys	ASII	Lys
	1010		120	Lou				Mot			611	Lou	Thr	Ara	Vol
1025		ASH	MI g		Val 1030	ASII	116	met		1035	oru	Leu	1111		1040
		Gln	Pro		Arg	Clv	Val	Glu			Aen	Tur	ماا		
Cys	Leu	0.111		1045	лıg	Oly	vai		1050	261	nsp	ı yı		1055	АТа
Sor	Phe	Leu			Tyr	Ara	Gln			Ala	Tyr	He			Gln
361	1116		1060	Oly	1) 1	Mig		1065	Lys	MIG	133		1070	1111	OIN
G1v	Pro			Glo	Ser	Thr			Phe	Trp	Arø			Trn	Glu
019		1075	,,, u	O, u	001		1080	пор	1 110	р		1085	200	در د .	U, U
His			Thr	He	He			Leu	Thr	Lvs	_		Glu	Met	Glv

Arg Glu Lys Cys His Gln Tyr Trp Pro Ala Glu Arg Ser Ala Arg Tyr Gln Tyr Phe Val Val Asp Pro Met Ala Glu Tyr Asn Met Pro Gln Tyr lle Leu Arg Glu Phe Lys Val Thr Asp Ala Arg Asp Gly Gln Ser Arg Thr Ile Arg Gln Ser Gln Phe Thr Asp Trp Pro Glu Gln Gly Val Pro Lys Thr Gly Glu Gly Phe Ile Asp Phe Ile Gly Gln Val His Lys Thr Lys Glu Gln Phe Gly Gln Asp Gly Pro Ile Thr Val His Cys Ser Ala Gly Val Gly Arg Thr Gly Val Phe lle Thr Leu Ser lle Val Leu Glu Arg Met Arg Tyr Glu Gly Val Val Asp Met Phe Gln Thr Val Lys Thr Leu Arg Thr Gln Arg Pro Ala Met Val Gln Thr Glu Asp Gln Tyr Gln Leu Cys Tyr Arg Ala Ala Leu Glu Tyr Leu Gly Ser Phe Asp His Tyr Ala Thr <210> 3203 <211> 126 <212> PRT <213> Homo sapiens <400> 3203 Met Cys Ser Arg Ser Ser His Gly Gly Ala Gln Arg Ser Gly Leu Arg Gly Asp Ala Cys Thr Val Gln Glu Arg Gly Ala Pro Cys Arg Ala Ser

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Ser Cys Ser Thr 11e Lys Leu Phe Phe Ser Phe Leu Leu Leu 11e Arg
35 40 45

Ile Leu Trp Gly Gly Thr Leu Lys Val Tyr Lys Asn Leu Ile Val His
50 55 60

Pro Thr Phe Ser Ser Phe Thr Tyr Leu Phe Ile Ser Val Trp Thr His
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Asp Phe Gln Cys Tyr Ser Met Gly Tyr Asn Pro Leu Leu Ser Leu Phe
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Gln Leu Leu Glu Cys Leu Met Lys Tyr Lys Gln Glu Val Trp Lys Asp
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Leu Leu Tyr Val Ile Ala Tyr Gly Pro Ser Gln Val Lys Pro Pro Ala
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Val Gln Met Leu Phe His Tyr Trp Pro Asn Leu Lys Pro Pro Gly Ala
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                                                 125
Cys Gln His Ile Glu Cys His Asn Ala Ile Asn Lys Pro Ala Val Lys
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Met Cys Ile Asp Pro Ser Leu Ser Val Ala Leu Gly Asp Lys Pro Pro
145
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                                                             160
Pro Leu Tyr Leu Cys Glu Glu Cys Ser Glu Arg Ile Ala Gly Asp His
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                                     170
Ser Glu Trp Leu Ile Asp Val Leu Leu Pro Gln Ala Glu Ile Ser Ala
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Thr	Arg	Glu	Cys	Gly	Ala	Glu	Glu	Leu	Val	Cys	Ala	Val	Glu	Ala	Val
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		275					280					285			
Glu	Leu	Asn	Arg	Arg	Arg	Gln	Leu	Gly	Leu	Ser	Ser	Ser	His	His	Ser
	290					295					300				
Leu	Asp	Asn	Ala	Asp	Phe	Asp	Asn	Lys	Asp	Asp	Asp	Arg	His	Asp	Gln
305					310					315					320
Arg	Leu	Leu	Ser	Gln	Phe	Gly	He	Trp	Phe	Leu	Va]	Ser	Leu	Cys	Thr
				325					330					335	
Pro	Ser	Glu	Asn	Thr	Pro	Thr	Glu	Ser	Leu	Ala	Arg	Leu	Val	Ala	Met
			340					345					350		
Val	Phe	Gln	Trp	Phe	His	Ser	Thr	Ala	Tyr	Met	Met	Asp	Asp	Glu	Val
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Gly	Ser	Leu	Val	Glu	Lys	Leu	Lys	Pro	Gln	Phe	Val	Thr	Lys	Trp	Leu
	370					375					380				
Lys	Thr	Val	Cys	Asp	Val	Arg	Phe	Asp	Val	Met	Val	Met	Cys	Leu	Leu
385					390					395					400
Pro	Lys	Pro	Met		Phe	Ala	Arg	Val		Gly	Tyr	Trp	Asp		Ser
_				405					410					415	_
Cys	Ser	Thr		Thr	GIn	Leu	Lys		Gly	Leu	Asn	Arg		Leu	Cys
,	T 1	D	420 T		17 3	7.1		425	0	. ; 1	m.	61	430	7.7	
Leu	He		lyr	Asn	Val	He		GIn	Ser	Val	irp		Cys	He	Met
D	C1	435	1	C1	A 1 =	11.	440	Tl	C1	W - 1	D	445	Λ	C1	1
rro		irp	Leu	GJU	Ala	He	Arg	Inr	GIU	vai		Asp	ASN	GIN	Leu
lua	450	Dha	A 20.00	C1	Vol.	455	Con	Luc	Mot	Dhe	460	Tla	C1	Lou	Cua
	Giu	rne	Arg	Glu		Leu	261.	Lys	мет		ASP	116	GIU	Leu	
465 Pro	Lov	Dro	Dho	Son	470 Mot	61	Cl.	Mot	Dho	475	Pho	Tla	Sor	Cvc	480
110	ren	110	гие	3er 485	Met	Glu	gju	MEL	490	оту	1116	116	Sel	495	мв
Phe	Thr	Glv	Tur		Ser	Ser	Val	Gln		Gln	Ala	Len	lan		Len

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His	Val	Leu	Ser	Glu	Leu	Asp	He	Met	Val	Pro	Leu	Gln	Leu	Leu	Ile
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Arg	Lys	Ser	Arg	Val	Ser	Glu	Leu	Ala	Gly	Asn	Leu	Ala	Ser	Arg	Arg
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Val	Ser	Val	Ala	Ser	Asp	Pro	Gly	Arg	Arg	Val	Gln	His	Asn	Met	Leu
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Ser	Pro	Phe	His	Ser	Pro	Phe	Gln	Ser	Pro	Phe	Arg	Ser	Pro	Leu	Arg
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Ser	Pro	Phe	Arg	Ser	Pro	Phe	Lys	Asn	Phe	Gly	His	Pro	Gly	Gly	Arg
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Thr	lle	Asp	Phe	Asp	Cys	Glu	Asp	Asp	Glu	Met	Asn	Leu	Asn	Cys	Phe
	610					615					620				
He	Leu	Met	Phe	Asp	Leu	Leu	Leu	Lys	Gln	Met	Glu	Leu	Gln	Asp	Asp
625					630					635					640
Gly	Ile	Thr	Met	Gly	Leu	Glu	His	Ser	Leu	Ser	Lys	Asp	Ile	He	Ser
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Ile	He	Asn	Asn	Val	Phe	Gln	Ala	Pro	Trp	Gly	Gly	Ser	His	Thr	Cys
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Gln	Lys	Asp	Glu	Lys	Ala	He	Glu	Cys	Asn	Leu	Cys	Gln	Ser	Ser	11e
		675					680					685			
Leu	Cys	Tyr	Gln	Leu	Ala	Cys	Glu	Leu	Leu	Glu	Arg	Leu	Ala	Pro	Lys
	690					695					700				
Glu	Glu	Ser	Arg	Leu	Val	Glu	Pro	Thr	Asp	Ser	Leu	Glu	Asp	Ser	Leu
705					710					715					720
Leu	Ser	Ser	Arg	Pro	Glu	Phe	lle	He	Gly	Pro	Glu	Gly	Glu	G]u	Glu
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Glu	Asn	Pro	Ala	Ser	Lys	His	Gly	Glu	Asn	Pro	Gly	Asn	Cys	Thr	Glu
			740					745					750		
Pro	Val	Glu	His	Ala	Ala	Val	Lys	Asn	Asp	Thr	Glu	Arg	Lys	Phe	Cys
		755					760					765			
Tyr	Gln	G1n	Leu	Pro	Val	Thr	Leu	Arg	Leu	Пe	Tyr	Thr	Пе	Phe	Gln
	770					775					780				
Glu	Met	Ala	Lvs	Phe	Glu	Glu	Pro	Asp	He	Leu	Phe	Asn	Met	Leu	Asn

785					790					795					800
Cys	Leu	Lys	He	Leu	Cys	Leu	His	Gly	Glu	Cys	Leu	Tyr	He	Ala	Arg
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Lys	Asp	His	Pro	Gln	Phe	Leu	Ala	Tyr	Ile	Gln	Asp	His	Met	Leu	lle
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Ala	Ser	Leu	Trp	Arg	Val	Val	Lys	Ser	Glu	Phe	Ser	Gln	Leu	Ser	Ser
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Leu	Ala	Val	Pro	Leu	Leu	Leu	His	Ala	Leu	Ser	Leu	Pro	His	Gly	Ala
	850					855					860				
Asp	Ile	Phe	Trp	Thr	Ile	Ile	Asn	Gly	Asn	Phe	Asn	Ser	Lys	Asp	Trp
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Lys	Met	Arg	Phe	Glu	Ala	Val	Glu	Lys	Val	Ala	Val	He	Cys	Arg	Phe
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Leu	Asp	lle	His	Ser	Val	Thr	Lys	Asn	His	Leu	Leu	Lys	Tyr	Ser	Leu
			900					905					910		
Ala	His	Ala	Phe	Cys	Cys	Phe	Leu	Thr	Ala	Val	Glu	Asp	Val	Asn	Pro
		915					920					925			
Ala	Val	Ala	Thr	Arg	Ala	Gly	Leu	Leu	Leu	Asp	Thr	Ile	Lys	Arg	Pro
	930					935					940				
Ala	Leu	Gln	Gly	Leu	Cys	Leu	Cys	Leu	Asp	Phe	Gln	Phe	Asp	Thr	Val
945					950					955					960
Val	Lys	Asp	Arg	Pro	Thr	lle	Leu	Ser	Lys	Leu	Leu	Leu	Leu	His	Phe
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Leu	Lys	G1n	Asp	lle	Pro	Ala	Leu	Ser	Trp	Glu	Phe	Phe	Val	Asn	Arg
			980					985					990		
Phe	Glu	Thr	Leu	Ser	Leu	Glu	Ala	Gln	Leu	His	Leu	Asp	Cys	Asn	Lys
		995				-	1000				:	1005			
Glu	Phe	Pro	Phe	Pro	Thr	Thr	Ile	Thr	Ala	Val	Arg	Thr	Asn	Val	Ala
-	1010					1015					1020				
Asn	Leu	Ser	Asp	Ala	Ala	Leu	Trp	Lys	lle	Lys	Arg	Ala	Arg	Phe	Ala
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Arg	Asn	Arg	Gln	Lys	Ser	Val	Arg	Ser	Leu	Arg	Asp	Ser	Val	Lys	Gly
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Pro	Val	Glu	Ser	Lys	Arg	Ala	Leu	Ser	Leu	Pro	Glu	Thr	Leu	Thr	Ser
			1060					1065					1070		
lvs	He	Arø	Gln	Gln	Ser	Pro	Glu	Asn	Asn	Acn	Thr	He	lvs	Asn	Len

10	75		1080			1085	
Leu Pro G	lu Asp	Ala Gly	Ile Asp	His Gl	n Thr Val	His Gln	Leu Ile
1090			1095		1100		
Thr Val P	ro Met	Lys Phe	Met Ala	Lys Ası	o Glu Ser	Ser Ala	Glu Ser
1105		1110			1115		1120
Asp Ile S	er Ser	Ala Lys	Ala Phe	Asn Th	r Val Lys	Arg His	Leu Tyr
		1125		1130)		1135
Val Leu L	eu Gly	Tyr Asp	Gln Gln	Glu Gly	y Cys Phe	Met Ile	Ala Pro
	1140			1145		1150	
Gln Lys M	et Arg	Leu Ser	Thr Cys	Phe Ası	n Ala Phe	Ile Ala	Gly Ile
11	55	4	1160			1165	
Ala Gln V	al Met	Asp Tyr	Asn lle	Asn Le	ı Gly Lys	His Leu	Leu Pro
1170			1175		1180		
Leu Val V	al Gln	Val Leu	Lys Tyr	Cys Se	r Cys Pro	Gln Leu	Arg His
1185		1190			1195		1200
Tyr Phe G	ln Gln	Pro Pro	Arg Cys	Ser Lei	ı Trp Ser	Leu Lys	Pro His
		1205		1210)		1215
lle Arg G	ln Met	Trp Leu	Lys Ala	Leu Lei	ı Val Ile	Leu Tyr	Lys Tyr
	1220			1225		1230	
Pro Tyr A	rg Asp	Cys Asp	Ile Ser	Lys Ile	e Leu Leu	His Leu	lle His
12	35		1240			1245	
Ile Thr V	al Asn	Thr Leu	Asn Ala	Gln Ty	r His Ser	Cys Lys	Pro His
1250			1255		1260		
Ala Thr A	la Gly	Pro Leu	Tyr Ser	Asp Ası	n Ser Asn	lle Ser	Arg Tyr
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Ser							

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⟨211⟩ 534

<212> PRT

<213> Homo sapiens

<400> 3206

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			20					25					30		
Gly	Cys	Ser	Gly	He	Leu	Ser	Val	Pro	Ala	Val	Ala	Met	His	Ser	Ala
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Gly	Thr	Pro	Arg	Ala	Glu	Ser	Pro	Met	Ser	Arg	Gln	Glu	Lys	Asp	Ala
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Glu	Leu	Asp	Arg	Arg	He	Val	Ala	Leu	Arg	Lys	Lys	Asn	Gln	Ala	Leu
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Leu	Arg	Arg	Tyr	Gln	Glu	Ile	Gln	Glu	Asp	Arg	Arg	Gln	Ala	Glu	Gln
				85					90					95	
Gly	G1 y	Met	Ala	Val	Thr	Thr	Pro	Ala	Leu	Leu	Gln	Pro	Asp	Gly	Leu
			100					105					110		
Thr	Val	Thr	He	Ser	Gln	Val	Pro	Gly	Glu	Lys	Arg	Val	Val	Ser	Arg
		115					120					125			
Asn		Ala	Arg	Gly	Thr		Gly	Pro	Arg	Val	Thr	Asn	Glu	Met	Leu
	130					135					140				
	Asp	GIu	Asp	Ala		Asp	His	Gly	Gly		Phe	Cys	Leu	G1 y	
145		0.1			150	m)		0.1		155				_	160
Leu	Val	Glu	Leu		Val	Thr	Met	Glu		Lys	Ala	Glu	Gly	Lys	Arg
T1.	V - 1	C	C1	165	D	TI			170		C1	6.1		175	6.1
116	vai	ser		Lys	Pro	Inr	Arg		Arg	Asn	61n	Gly		Glu	Gly
Cor	Duo	C1v	180	A 30.00	V o 1	The	Λ	185	D	D	ть	C.L.	190	A 7 .	7.1
361	110	195	GTy	AI g	val	IIII	200	ser	rro	Pro	ınr		val	Ala	116
Ser	Sor		Sor	Δla	Ara	Lvc		Sor	Trn	Clu	Dro	205	Sor	Arg	Dno
561	210	пэр	Jei	MIA	мg	215	Gry	361	пр	oru	220	11 b	261	AI g	110
Val		Glu	Pro	Pro	Glu		Glv	Trn	Asn	Tyr		Gln	Trn	Lys	G1n
225		014			230	7110	01,	пр	пор	235	Ald	0111	11 p	Lys	240
	Arg	Glu	G]n	He		Leu	Ala	Arg	l.eu		Arg	His	Arg	Asp	
	Ü			245				6	250		6		0	255	
Gln	G1 y	Asp	Trp	Arg	Arg	Pro	Trp	Asp		Asp	Lvs	Ala	Lvs	Ser	Thr
			260	Ū	J		·	265		•	-		270		
Leu	Gln	Asp	Cys	Ser	Gln	Leu	Arg		Glu	Gly	Pro	Ala	Arg	Ala	Gly
		275					280	-				285	-		-
Ser	Arg	Arg	Gly	Pro	Arg	Ser	His	Gln	Lys	Leu	G1n	Pro	Pro	Pro	Leu

	290					295					300				
Leu	Pro	Asp	Gly	Lys	Gly	Arg	Gly	Gly	Gln	Ala	Ser	Arg	Pro	Ser	Val
305					310					315					320
Ala	Pro	Ala	Thr	Gly	Ser	Lys	Ala	Arg	Gly	Lys	Glu	Arg	Leu	Thr	Gly
				325					330					335	
Arg	Ala	Arg	Arg	Trp	Asp	Met	Lys	Glu	Asp	Lys	Glu	Glu	Leu	Glu	G1 y
			340					345					350		
Gln	Glu	Gly	Ser	Gln	Ser	Thr	Arg	Glu	Thr	Pro	Ser	Glu	Glu	Glu	Gln
		355					360					365			
Ala	Gln	Lys	Gln	Ser	Gly	Met	Glu	Gln	Gly	Arg	Leu	Gly	Ser	Ala	Pro
	370					375					380				
Ala	Ala	Ser	Pro	Ala	Leu	Ala	Ser	Pro	Glu	Gly	Pro	Lys	G1 y	Glu	Ser
385					390					395					400
Val	Ala	Ser	Thr	Ala	Ser	Ser	Val	Pro	Cys	Ser	Pro	Gln	Glu	Pro	Asp
				405					410					415	
Leu	Ala	Pro	Leu	Asp	Leu	Ser	Leu	Gly	Gly	Ala	Gly	lle	Pro	Gly	Pro
			420					425					430		
Arg	Glu	Ser	Gly	Cys	Val	Leu	Gly	Leu	Arg	Pro	Gly	Ala	Gln	Glu	Ser
		435					440					445			
Pro	Val	Ser	Trp	Pro	Glu	Gly	Ser	Lys	Gln	Gln	Pro	Leu	Gly	Trp	Ser
	450					455					460				
Asn	His	Gln	Ala	Glu	Leu	Glu	Val	Gln	Thr	Cys	Pro	Glu	Pro	Gln	Arg
465					470					475					480
Gly	Ala	Gly	Leu	Pro	Glu	Pro	Gly	Glu	Asp	Arg	Ser	Gly	Lys	Ser	Gly
				485					490					495	
Ala	Gln	G1n	Gly	Leu	Ala	Pro	Arg	Ser	Arg	Pro	Thr	Arg	Gly	Gly	Ser
			500					505					510		
G1n	Arg	Ser	Arg	G1y	Thr	Ala	Gly	Va]	Arg	Arg	Arg	Thr	G1 y	Arg	Pro
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<213> Homo sapiens
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Leu Glu Arg Cys Thr Asp Lys Leu Glu Arg Asp Arg Leu Ile Leu Phe
         35
                             40
                                                  45
Leu Asn Lys Leu 11e Leu Asn Lys Lys Asn Val Lys Asp Leu Met Asp
                         55
Ser Asn Gly 11e Arg 11e Leu Val Asp Leu Leu Thr Leu Ala His Leu
 65
                     70
His Val Ser Arg Ala Thr Val Pro Leu Gln Ser Asn Val Ile Glu Ala
                 85
                                     90
Ala Pro Asp Met Lys Arg Glu Ser Glu Lys Glu Trp Tyr Phe Gly Asn
                                105
            100
                                                     110
Ala Asp Lys Glu Arg Ser Gly Pro Tyr Gly Phe His Glu Met Gln Glu
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                            120
                                                 125
Leu Trp Thr Lys Gly Met Leu Asn Ala Lys Thr Arg Cys Trp Ala Gln
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Gly Met Asp Gly Trp Arg Pro Leu Gln Ser Ile Pro Gln Leu Lys Trp
145
                    150
                                         155
                                                             160
Cys Leu Leu Ala Ser Gly Gln Ala Val Leu Asn Glu Thr Asp Leu Ala
                165
                                     170
Thr Leu Ile Leu Asn Met Leu Ile Thr Met Cys Gly Tyr Phe Pro Ser
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                                185
Arg Asp Gln Asp Asn Ala IIe IIe Arg Pro Leu Pro Lys Val Lys Arg
        195
                            200
                                                 205
Leu Leu Ser Asp Ser Thr Cys Leu Pro His 11e 11e Gln Leu Leu Leu
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Thr Phe Asp Pro Thr Leu Val Glu Lys Val Ala Ile Leu Leu Tyr His

lle Met Gln Asp Asn Pro Gln Leu Pro Arg Leu Tyr Leu Ser Gly Val

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Arg	Phe	Leu	Lys	Tyr	Thr	His	Thr	Lys	Gln	Ala	Phe	Lys	Ser	Glu	Glu
		275					280					285			
Thr	Lys	Gly	Gln	Asp	He	Phe	Gln	Arg	Ser	Пе	Leu	Gly	His	He	Leu
	290					295					300				
Pro	Glu	Ala	Met	Val	Cys	Tyr	Leu	Glu	Asn	Tyr	Glu	Pro	Glu	Lys	Phe
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Ser	Glu	Ile	Phe	Leu	Glÿ	Glu	Phe	Asp	Thr	Pro	Glu	Ala	Ile	Trp	Ser
				325					330					335	
Ser	Glu	Met	Arg	Arg	Leu	Met	He	G1 u	Lys	He	Ala	Ala	His	Leu	Ala
			340					345					350		
Asp	Phe	Thr	Pro	Arg	Leu	Gln	Ser	Asn	Thr	Arg	Ala	Leu	Tyr	G1n	Tyr
		355					360					365			
Cys	Pro	lle	Pro	11e	lle	Asn	Tyr	Pro	Gln	Leu	Glu	Asn	Glu	Leu	Phe
	370					375					380				
Cys	Asn	Ile	Tyr	Tyr	Leu	Lys	Gln	Leu	Cys	Asp	Thr	Leu	Arg	Phe	Pro
385					390					395					400
Asn	Trp	Pro	He	Lys	Asp	Pro	Val	Lys	Leu	Leu	Lys	Asp	Thr	Leu	Asp
				405					410					415	
Ala		1											~		Aen
	Trp	Lys	Lys	Glu	Val	Glu	Lys	Lys	Pro	Pro	Met	Met	Ser	He	nsp
	Trp	Lys	Lys 420	Glu	Val	Glu	Lys	Lys 425	Pro	Pro	Met	Met	Ser 430	He	пэр
Asp			420			G1u Asn		425					430		
Asp			420					425					430		
	Ala	Tyr 435	420 Glu	Val	Leu		Leu 440	425 Pro	Gln	Gly	Gln	Gly 445	430 Pro	His	Asp
	Ala	Tyr 435	420 Glu	Val	Leu	Asn	Leu 440	425 Pro	Gln	Gly	Gln	Gly 445	430 Pro	His	Asp
Glu	Ala Ser 450	Tyr 435 Lys	420 Glu Ile	Va] Arg	Leu Lys	Asn Ala	Leu 440 Tyr	425 Pro Phe	Gln Arg	Gly Leu	Gln Ala 460	Gly 445 Gln	430 Pro Lys	His Tyr	Asp His
Glu	Ala Ser 450	Tyr 435 Lys	420 Glu Ile	Va] Arg	Leu Lys	Asn Ala 455	Leu 440 Tyr	425 Pro Phe	Gln Arg	Gly Leu	Gln Ala 460	Gly 445 Gln	430 Pro Lys	His Tyr	Asp His
Glu Pro 465	Ala Ser 450 Asp	Tyr 435 Lys Lys	420 Glu Ile Asn	Val Arg Pro	Leu Lys Glu 470	Asn Ala 455	Leu 440 Tyr Arg	425 Pro Phe Asp	Gln Arg Met	Gly Leu Phe 475	Gln Ala 460 Glu	Gly 445 Gln Lys	430 Pro Lys Val	His Tyr Asn	Asp His Lys 480
Glu Pro 465	Ala Ser 450 Asp	Tyr 435 Lys Lys	420 Glu Ile Asn	Val Arg Pro	Leu Lys Glu 470	Asn Ala 455 Gly	Leu 440 Tyr Arg	425 Pro Phe Asp	Gln Arg Met	Gly Leu Phe 475	Gln Ala 460 Glu	Gly 445 Gln Lys	430 Pro Lys Val	His Tyr Asn	Asp His Lys 480
Glu Pro 465 Ala	Ala Ser 450 Asp	Tyr 435 Lys Lys Glu	420 Glu Ile Asn Phe	Val Arg Pro Leu 485	Leu Lys Glu 470 Cys	Asn Ala 455 Gly	Leu 440 Tyr Arg Lys	425 Pro Phe Asp	Gln Arg Met Ala 490	Gly Leu Phe 475 Lys	Gln Ala 460 Glu Ile	Gly 445 Gln Lys Val	430 Pro Lys Val	His Tyr Asn Gly 495	Asp His Lys 480 Pro
Glu Pro 465 Ala	Ala Ser 450 Asp	Tyr 435 Lys Lys Glu	420 Glu Ile Asn Phe	Val Arg Pro Leu 485	Leu Lys Glu 470 Cys	Asn Ala 455 Gly Thr	Leu 440 Tyr Arg Lys	425 Pro Phe Asp	Gln Arg Met Ala 490	Gly Leu Phe 475 Lys	Gln Ala 460 Glu Ile	Gly 445 Gln Lys Val	430 Pro Lys Val	His Tyr Asn Gly 495	Asp His Lys 480 Pro
Glu Pro 465 Ala	Ala Ser 450 Asp	Tyr 435 Lys Lys Glu	420 Glu Ile Asn Phe	Val Arg Pro Leu 485	Leu Lys Glu 470 Cys	Asn Ala 455 Gly Thr	Leu 440 Tyr Arg Lys	425 Pro Phe Asp Ser Leu	Gln Arg Met Ala 490	Gly Leu Phe 475 Lys	Gln Ala 460 Glu Ile	Gly 445 Gln Lys Val	430 Pro Lys Val Asp	His Tyr Asn Gly 495	Asp His Lys 480 Pro
Glu Pro 465 Ala Asp	Ala Ser 450 Asp Tyr	Tyr 435 Lys Lys Glu	420 Glu Ile Asn Phe Asn 500	Val Arg Pro Leu 485 Ile	Leu Lys Glu 470 Cys	Asn Ala 455 Gly Thr	Leu 440 Tyr Arg Lys	425 Pro Phe Asp Ser Leu 505	Gln Arg Met Ala 490 Lys	Gly Leu Phe 475 Lys Thr	Gln Ala 460 Glu IIe Gln	Gly 445 Gln Lys Val	430 Pro Lys Val Asp Ile 510	His Tyr Asn Gly 495 Leu	Asp His Lys 480 Pro
Glu Pro 465 Ala Asp	Ala Ser 450 Asp Tyr	Tyr 435 Lys Lys Glu	420 Glu Ile Asn Phe Asn 500	Val Arg Pro Leu 485 Ile	Leu Lys Glu 470 Cys	Asn Ala 455 Gly Thr	Leu 440 Tyr Arg Lys	425 Pro Phe Asp Ser Leu 505	Gln Arg Met Ala 490 Lys	Gly Leu Phe 475 Lys Thr	Gln Ala 460 Glu IIe Gln	Gly 445 Gln Lys Val	430 Pro Lys Val Asp Ile 510	His Tyr Asn Gly 495 Leu	Asp His Lys 480 Pro

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Ser	Lys	Glu	Ser	Pro	Leu	Leu	Pro	Ala	Ala	Thr	Glu	Leu	Ala	Phe	His
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Thr	Val	Asn	Cys	Ser	Ala	Leu	Asn	Ala	Glu	Glu	Leu	Arg	Arg	Glu	Asn
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Gly	Leu	Glu	Val	Leu	Gln	Glu	Ala	Phe	Ser	Arg	Cys	Val	Ala	Val	Leu
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Thr	Arg	Ser	Ser	Lys	Pro	Ser	Asp	Met	Ser	Val	Gln	Val	Cys	Gly	Tyr
		595					600					605			
Ile	Ser	Lys	Cys	Tyr	Ser	Val	Ala	Ala	Gln	Phe	Glu	Glu	Cys	Arg	Glu
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Lys	He	Thr	Glu	Met	Pro	Ser	He	He	Lys	Asp	Leu	Cys	Arg	Val	Leu
625					630					635					640
Tyr	Phe	Gly	Lys	Ser	He	Pro	Arg	Val	Ala	Ala	Leu	Gly	Val	Glu	Cys
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Val	Ser	Ser	Phe	Ala	Val	Asp	Phe	Trp	Leu	Gln	Thr	His	Leu	Phe	G1n
			660					665					670		
Ala	Gly	He	Leu	Trp	Tyr	Leu	Leu	Gly	Phe	Leu	Phe		Tyr	Asp	Tyr
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Thr		Glu	Glu	Ser	Gly		Gln	Lys	Ser	Glu		Thr	Asn	Gln	Gln
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	Val	Ala	Asn	Ser		Ala	Lys	Leu	Ser		His	Ala	Leu	Ser	
705	0.1	0.1	m		710	0.7	0.1			715	T>	0.1			720
Leu	Gly	Gly	Tyr		Ala	Glu	Glu	GIn		Ihr	Pro	Glu	Asn		Ihr
T 1			C	725	. 1	C1	14 .		730	Б	т	12 1	4.7	735	,
11e	Arg	Lys		Leu	Ala	Gly	Met		Inr	Pro	lyr	vai	Ala	Arg	Lys
Lau	A1.0	Vol.	740	C 0 12	Val	Tlaza	C1	745	Lan	Lya	Mot	Lau	750	Con	Aan
Leu	мта	755	на	261	val	1111	760	116	Leu	rys	Met	765	Asn	261	ASII
Thr	Clu		Dro	Tur	Lau	110		Acn	Acn	Sor	The		Ala	Clu	Lou
1111	770	361	110	1 y 1	Leu	775	пр	ASII	АЗП	361	780	MIG	ALO	Olu	Leu
Lou		Pho	Lou	Clu	Sor		Cln.	Clu	Aen	Mat		lve	Lys	Glv	Acn
785	Olu	1 116	Leu	010	790	OIH	0111	Gra	азп	795	116	rys	Lyo	Ory	800
	Aen	Lve	Thr	Tyr		Sor	Glu	Pho	Val		Sor	Aen	His	Ala	
Oys	usp	டரவ	1111	805	Q1 y	961	GIU	1116	810	1 9 2	OC 1	der	11.1.3	815	Lys
Glu	Leu	He	Val		Glu	He	Phe	Val		Val	Tvr	Asn	Glu		Pro
O I U	J - U	3 1 C		013			1 110	,	111 8						

			820					825					830		
Thr	Phe	Gln	Leu	Glu	Val	Pro	Lys	Ala	Phe	Ala	Ala	Ser	Leu	Leu	Asp
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Tyr	He	Gly	Ser	Gln	Ala	Gln	Tyr	Leu	His	Thr	Phe	Met	Ala	He	Thr
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His	Ala	Ala	Lys	Val	Glu	Ser	Glu	Gln	His	Gly	Asp	Arg	Leu	Pro	Arg
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Val	${\tt Glu}$	Met	Ala	Leu	Glu	Ala	Leu	Arg	Asn	Val	Ile	Lys	Tyr	Asn	Pro
				885		•			890					895	
Gly	Ser	Glu	Ser	Glu	Cys	He	Gly	His	Phe	Lys	Leu	He	Phe	Ser	Leu
			900					905					910		
Leu	Arg	Val	His	Gly	Ala	Gly	Gln	Val	Gln	Gln	Leu	Ala	Leu	G1u	Va]
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Val	Asn	He	Val	Thr	Ser	Asn	Gln	Asp	Cys	Val	Asn	Asn	He	Ala	Glu
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Ser	Arg	Gln	Leu	Val	Leu	Glu	Thr	Leu	Tyr	Ala	Leu	Thr	Ser	Ser	Thr
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Lys	lle	He	Lys	Glu	Ala	Met	Ala	Lys	Gly	Ala	Leu	lle	Tyr	Leu	Leu
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		995					1000					1005			
		Phe	Ala	Lys		Thr	Ala	Asp	Lys			G1 y	Pro	Lys	Val
	1010	m.				1015					1020				
	_	Thr	Leu			Phe	Leu	Pro			Phe	Met	Asp		
1025			Б		1030					1035	61	61	TI		1040
Arg	Asp	Asn			Ala	Ala	Val			Phe	Glu	G1 y			Glu
Δ	D	C1		1045	Т	Α	Α		1050	Δ	Λ	1		1055	Tl
Asn	Pro			116	rp	Asn			ser	Arg	ASP			ser	ınr
Tha	Vo.1		1060	Mot	Mot	Lau		1065	Dho	lve	Acn		1070 Clp	Aan	Aan
1.11.1			Olu	wet	Me t	Leu		1115	rne	Lys			GIH	nsp	ASII
Pro		1075	Acr	Tro	Lve	Leu	1080 Pro	61	Acr	Pho		1085 Val	Val	Pho	Glo
	01u 1090	піа	ASII	пр		1095	110	Olu	nsp		1100	141	101	1116	OTY
		Glu	Glv	Glu		Ala	Va1	Glv	Glv			Len	Arg	He	Phe

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Ile Ala Gln	Pro Ala	Trp Val L	Leu Arg L	ys Pro Arg	Glu Phe Leu lle
	1125		11:	30	1135
Ala Leu Leu	Glu Lys I	Leu Thr G	Glu Leu L	eu Glu Lys	Asn Asn Pro His
	1140		1145		1150
Gly Glu Thr	Leu Glu '	Thr Leu T	Chr Met A	la Thr Val	Cys Leu Phe Ser
1155		11	60		1165
Ala Gln Pro	Gln Leu	Ala Asp G	Gln Val P	ro Pro Leu	Gly His Leu Pro
1170		1175		1180	
Lys Val Ile	Gln Ala I	Met Asn H	His Arg A	sn Asn Ala	Ile Pro Lys Ser
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Ala lle Arg	Val Ile I	His Ala L	.eu Ser G	lu Asn Glu	Leu Cys Val Arg
	1205		12	10	1215
Ala Met Ala	Ser Leu	Glu Thr I	lle Gly P	ro Leu Met	Asn Gly Met Lys
	1220		1225		1230
Lys Arg Ala	Asp Thr	Val Gly L	Leu Ala C	ys Glu Ala	lle Asn Arg Met
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Phe Gln Lys	Glu Gln	Ser Glu L	.eu Val A	la Gln Ala	Leu Lys Ala Asp
1250		1255		1260	
Leu Val Pro	Tyr Leu l	Leu Lys L	.eu Leu G	lu Gly 11e	Gly Leu Glu Asn
1265	1:	270		1275	1280
Leu Asp Ser	Pro Ala	Ala Thr L	.ys Ala G	ln lle Val	Lys Ala Leu Lys
	1285		129	90	1295
Ala Met Thr	Arg Ser	Leu Gln T	fyr Gly G	lu Gln Val	Asn Glu lle Leu
	1300		1305		1310
Cys Arg Ser					Lys His Asp Leu
1315		13	320		1325
Phe lle Ser	Glu Ser	Gln Thr A	Ala Gly T	yr Leu Thr	Gly Pro Gly Val
1330		1335		1340	
Ala Gly Tyr	Leu Thr	Ala Gly T	Thr Ser T	hr Ser Val	Met Ser Asn Leu
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Pro Pro Pro	Val Asp 1	His Glu A	Ala Gly A	sp Leu Gly	Tyr Gln Thr
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Thr Val Leu Leu Ala Glu Glu Asp Lys Ala Glu Asp Asp Val Val Phe
                                 25
                                                      30
             20
Tyr Leu Val Phe Leu Gly Ser Thr Leu Arg His Cys Thr Ser Thr Arg
                             40
                                                  45
Lys Val Ser Ser Asp Thr Leu Glu Thr Ile Ala Pro Gly His Asp Cys
                         55
Cys Glu Thr Val Lys Val Gln Leu Cys Ala Ser Lys Glu Gly Leu Pro
 65
Val Phe Val Val Ala Glu Glu Asp Phe His Phe Val Gln Asp Glu Ala
                                      90
Tyr Asp Ala Ala Gln Phe Leu Ala Thr Ser Ala Gly Asn Gln Gln Ala
            100
                                                     110
                                105
Leu Asn Phe Thr Arg Phe Leu Asp Gln Ser Gly Pro Pro Ser Gly Asp
        115
                            120
                                                 125
Val Asn Ser Leu Asp Lys Lys Leu Val Leu Ala Phe Arg His Leu Lys
                        135
Leu Pro Thr Glu Trp Asn Val Leu Gly Thr Asp Gln Ser Leu His Asp
145
                    150
                                         155
                                                             160
Ala Gly Pro Arg Glu Thr Leu Met His Phe Ala Val Arg Leu Gly Leu
                165
                                    170
Leu Arg Leu Thr Trp Phe Leu Ser Gln Lys Pro Gly Gly Arg Gly Ala
            180
                                 185
                                                     190
Leu Ser 11e His Asn Gln Glu Gly Ala Thr Pro Val Ser Leu Ala Leu
                            200
Glu Arg Gly Tyr His Lys Leu His Gln Leu Leu Thr Glu Glu Asn Ala
                        215
                                             220
Gly Glu Pro Asp Ser Trp Ser Ser Leu Ser Tyr Glu lle Pro Tyr Gly
                                         235
225
                    230
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Asp Cys Ser Val Arg His His Arg Glu Leu Asp lle Tyr Thr Leu Thr

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Ser	Glu	Ser	Asp	Ser	His	His	Glu	His	Pro	Phe	Pro	Gly	Asp	Gly	Cys
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Thr	Gly	Pro	11e	Phe	Lys	Leu	Met	Asn	He	Gln	Gln	Gln	Leu	Met	Lys
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Thr	Asn	Leu	Lys	Gln	Met	Asp	Ser	Leu	Met	Pro	Leu	Met	Met	Thr	Ala
	290					295					300				
Gln	Asp	Pro	Ser	Ser	Ala	Pro	Glu	Thr	Asp	G1 y	Gln	Phe	Leu	Pro	Cys
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Ala	Pro	Glu	Pro	Thr	Asp	Pro	G1n	Arg	Leu	Ser	Ser	Ser	Glu	Glu	Thr
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Glu	Ser	Thr	Gln	Cys	Cys	Pro	Gly	Ser	Pro	Val	Ala	Gln	Thr	Glu	Ser
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Pro	Cys	Asp	Leu	Ser	Ser	He	Val	Glu	Glu	Glu	Asn	Thr	Asp	Arg	Ser
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Cys	Arg	Lys	Lys	Asn	Lys	Gly	Val	Glu	Arg	Lys	Gly	Glu	Glu	Val	Glu
	370					375					380				
Pro	Ala	Pro	lle	Val	Asp	Ser	Gly	Thr	Val	Ser	Asp	Gln	Asp	Ser	Cys
385					390					395					400
Leu	Gln	Ser	Leu	Pro	Asp	Cys	Gly	Val	Lys	Gly	Thr	Glu	Gly	Leu	Ser
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Ser	Cys	Gly.	Asn	Arg	Asn	Glu	Glu	Thr	Gly	Thr	Lys	Ser	Ser	Gly	Met
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Pro	Thr	Asp	Gln	Glu	Ser	Leu	Ser	Ser	G1 y	Asp	Ala	Val	Leu	Gln	Arg
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Asp	Leu	Val	Thr	Glu	Pro	Gly	Thr	Ala	Gln	Tyr	Ser	Ser	Gly	Gly	Glu
	450					455					460				
	Gly	Gly	lle	Ser		Thr	Asn	Val	Ser	Thr	Pro	Asp	Thr	Ala	G1 y
465					470					475					480
Glu	Met	Glu	His		Leu	Met	Asn	Pro		Ala	Thr	Val	Arg		Asn
				485					490					495	
Val	Leu	Gln		Gly	Glu	Ser	Thr		G] u	Arg	Phe	G] u	Asn	Ser	Asn
			500					505					510		
He	Gly		Ala	Gly	Ala	Ser		Val	His	Val	Thr		Lys	Pro	Val
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Asp	Lys	He	Ser	Val	Pro	Asn	Cys	Ala	Pro	Ala	Ala	Ser	Ser	Leu	Asp

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Gly	Asn	Lys	Pro	Ala	Glu	Ser	Ser	Leu	Ala	Phe	Ser	Asn	Glu	Glu	Thr
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Ser	Thr	Glu	Lys	Thr	Ala	Glu	Thr	Glu	Thr	Ser	Arg	Ser	Cys	Glu	Glu
				565					570					575	
Ser	Ala	Asp	Ala	Pro	Val	Asp	Gln	Asn	Ser	Val	Val	He	Pro	Ala	Ala
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Ala	Lys	Asp	Lys	He	Ser	Asp	Gly	Leu	Glu	Pro	Tyr	Thr	Leu	Leu	Ala
		595					600					605			
Ala	Gly	He	Gly	Glu	Ala	Met	Ser	Pro	Ser	Asp	Leu	Ala	Leu	Leu	Val
	610					615					620				
Leu	Glu	Glu	Asp	Val	Met	Pro	His	Gln	Asn	Ser	Glu	Thr	Asn	Ser	Ser
625					630					635					640
His	Ala	Gln	Ser	Gln	Lys	Gly	Lys	Ser	Ser	Pro	He	Cys	Ser	Thr	Thr
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G1 y	Asp	Asp	Lys	Leu	Cys	Ala	Asp	Ser	Ala	Cys	Gln	Gln	Asn	Thr	Val
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Thr	Ser		Gly	Asp	Leu	Val	Ala	Lys	Leu	Cys	Asp		Ile	Val	Ser
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Glu		Glu	Ser	Thr	Thr		Arg	Gln	Pro	Ser		Gln	Asp	Pro	Pro
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	Ala	Ser	His	Cys		Asp	Pro	GIn	Ala		Thr	Val	Thr	Ser	
705	V 7			Tr.	710	6.1		4.1		715	C	15	131	,	720
Pro	vai	Arg	Asp		GIN	GIU	Arg	Ala		Pne	Cys	rro	rne		vai
Vol	Aon	Aon	Lva	725	Cln	Ana	Luc	Aan	730 Vol.	Lva	Lou	Acn	Luc	735	Lou
vai	nsp	ASII	740	Gly	0111	Λīg	Lys	745	vai	Lys	Leu	лър	750	110	Leu
Thr	Aen	Mat		Glu	Val	Val	Ser		Pro	Hic	Pro	Val		Pro	lve
1111	ИЗП	755	LCu	Olu	141	101	760	1113	110	1113	110	765	101	110	L) 3
Met	Glu		Glu	Len	Val	Pro	Asp	Gln	Ala	Val	He		Asp	Ser	Thr
inc c	770	D, o	ora	1500		775	пор	0111	1114		780	.,,,,	пор	501	
Phe		Leu	Ala	Asn	Ser		G1 y	Ser	Glu	Ser		Thr	Lvs	Asp	Asp
785					790					795			•	•	800
	Leu	Ser	Phe	Val		Ser	G1n	Lys	Glu		G1 y	Thr	Ala	Thr	
				805					810					815	
Glu	Leu	Hic	Thr	Ala	Thr	Asn	Tyr	Ara		Glv	Pro	Asn	Glv	Asn	Ser

			820					825					830		
Asn	Glu	Pro	Asp	Thr	Arg	Pro	Leu	Glu	Asp	Arg	Ala	Ala	Gly	Leu	Ser
•		835					840					845			
Thr	Ser	Ser	Thr	Ala	Ala	Glu	Leu	Gln	His	Gly	Met	Gly	Asn	Thr	Ser
	850					855					860				
Leu	Thr	Gly	Leu	Gly	Gly	Glu	His	Glu	Gly	Pro	Ala	Pro	Pro	Ala	Ile
865					870					875					880
Pro	Glu	Ala	Leu	Asn	Ile	Lys	Gly	Asn	Thr	Asp	Ser	Ser	Leu	Gln	Ser
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Lys	Leu	Leu	Val	Val	Ser	Glu	Ser	Ser	Ala	Ala	Gln	Glu	Gln	Asp	Lys
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Asp	Lys	Ala	Val	Thr	Cys	Ser	Ser	He	Lys	Glu	Asn	Ala	Leu	Ser	Ser
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Gly	Thr	Leu	Gln	Glu	Glu	Gln	Arg	Thr	Pro	Pro	Pro	Gly	Gln	Asp	Thr
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Gln	Gln	Phe	His	Glu	Lys	Ser	Ile	Ser	Ala	Asp	Cys	Ala	Lys	Asp	Lys
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Ala	Leu	Gln	Leu	Ser	Asn	Ser	Pro	Gly	Ala	Ser	Ser	Ala	Phe	Leu	Lys
			980					985					990		
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Ala	Thr	Glu	Ser	Arg	Gln	Glu	Ala	Leu	Gly	Ala	Glu	His	Asn	Ser	Ser
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Ala	Leu	Leu			Leu	Leu	Pro			Ser	Asp	Gly			Ala
		_		1045					1050					1055	
Leu	Asn			GIn	Ala	Ser	Pro		Asp	Val	Gly			Asn	Thr
61	C		1060		m)	0		1065	0.1		C		1070	37 3	T-1
GIn			Gly	Lys	lhr		Ala	Cys	6.LU	Val			Asn	Val	lhr
V. I		1075	T1	C1	V. I		1080		61.	C1.		1085	C1.	D	Α.
		vaı	ınr	ыу			Ala	Leu	GIN			BIA	oju	rro	Arg
	1090 Glu	Acr	110	Son		1095 Asn	Thr	Cla	Acr		1100 Leu	ΠA	Pro	Acn	Val
111 8	$o_{1}u$	$n_{\rm SH}$	116	261	1112	nsii	1.11.1	OTIL	nsp	116	Leu	116	110	non	val

1105	,			1	110				1	1115				1	120
Leu	Leu	Ser	Gln	Glu	Lys	Asn	Ala	Val	Leu	Gly	Leu	Pro	Val	Ala	Leu
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Gln	Asp	Lys	Ala	Val	Thr	Asp	Pro	Gln	Gly	Val	Gly	Thr	Pro	Glu	Met
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He	Pro	Leu	Asp	Trp	Glu	Lys	Gly	Lys	Leu	Glu	Gly	Ala	Asp	His	Ser
]	155]	160				1	1165			
Cys	Thr	Met	Gly	Asp	Ala	Glu	Glu	Ala	Gln	He	Asp	Asp	Glu	Ala	His
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Pro	Val	Leu	Leu	Gln	Pro	Val	Ala	Lys	Glu	Leu	Pro	Thr	Asp	Met	Glu
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Leu	Ser	Ala	His	Asp	Asp	Gly	Ala	Pro	Ala	Gly	Val	Arg	Glu	Val	Thr
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Arg	Ala	Pro	Pro	Ser	G1 y	Arg	Glu	Arg	Ser	Thr	Pro	Ser	Leu	Pro	Cys
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Met	Val	Ser	Ala	Gln	Asp	Ala	Pro	Leu	Pro	Lys	Gly	Ala	Asp	Leu	He
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Glu	Glu	Ala	Ala	Ser	Arg	He	Val	Asp	Ala	Val	Ile	Glu	G1n	Val	Lys
1	250				1	255				-	1260				
Ala	Ala	Gly	Ala	Leu	Leu	Thr	Glu	Gly	Glu	Ala	Cys	His	Met	Ser	Leu
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Ser	Ser	Pro	Glu	Leu	Gly	Pro	Leu	Thr	Lys	Gly	Leu	Glu	Ser	Ala	Phe
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Thr	Glu	Lys	Val	Ser	Thr	Phe	Pro	Pro	Gly	Glu	Ser	Leu	Pro	Met	Gly
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Trp Cys	Thr lle	Glu	Pro	Cys	Pro	Asp	Ala	Ala	Ser	Leu	Leu	Ala	Ser
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Ser Asp	Leu Pho	His	Ser	Pro	Ser	Asp	Asp	Met	Asp	Ser	He	lle	Phe
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Pro Lys I	Pro Glu	Glu	Glu	His	Leu	Ala	Cys	Asp	Ile	Thr	Gly	Ser	Ser
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Arg Glu	Ser Glu	ı Ser	Glu	Pro	Ala	Asp	Pro	Gly	Asp	Val	Glu	Glu	Glu
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Glu Met	Asp Se	· lle	Thr	Glu	Val	Pro	Ala	Asn	Cys	Ser	Val	Leu	Arg
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Ser Ser	Met Ar	g Ser	Leu	Ser	Pro	Phe	Arg	Arg	His	Ser	Trp	Gly	Pro
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Gly Lys	Asn Ala	a Ala	Ser	Asp	Ala	Glu	Met	Asn	His	Arg	Ser	Phe	Ser
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Leu Glu	Gly Le	ı Thr	Gly	Gly	Ala	Gly	Val	Gly	Asn	Lys	Pro	Ser	Ser
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Ser Leu	Glu Val	Ser	Ser	Ala	Asn	Ala	Glu	Glu	Leu	Arg	His	Pro	Phe
		1605					1610					1615	
Ser Gly	Glu Gli	ı Arg	Val	Asp	Ser	Leu	Val	Ser	Leu	Ser	Glu	Glu	Asp
	1620)				1625					1630		
Leu Glu	Ser Asj	Gln	Arg	Glu	His	Arg	Met	Phe	Asp	Gln	Gln	lle	Cys
1	635				1640					1645			
His Arg	Ser Ly:	s Gln	Gln	Gly	Phe	Asn	Tyr	Cys	Thr	Ser	Ala	lle	Ser
1650			1	655					1660				
Ser Pro	Leu Th	^ Lys	Ser	He	Ser	Leu	Met	Thr	lle	Ser	His	Pro	Gly
1665]	1670					1675					1680

Leu Asp Asn Ser Arg Pro Phe His Ser Thr Phe His Asn Thr Ser Ala Asn Leu Thr Glu Ser lle Thr Glu Glu Asn Tyr Asn Phe Leu Pro His Ser Pro Ser Lys Lys Asp Ser Glu Trp Lys Ser Gly Thr Lys Val Ser Arg Thr Phe Ser Tyr IIe Lys Asn Lys Met Ser Ser Ser Lys Lys Ser Lys <210> 3209 <211> 586 <212> PRT <213> Homo sapiens <400> 3209 Met Lys Tyr Ile Leu Val Thr Gly Gly Val Ile Ser Gly Ile Gly Lys Gly Ile Ile Ala Ser Ser Ile Gly Thr Ile Leu Lys Ser Cys Gly Leu Arg Val Thr Ala Ile Lys Ile Asp Pro Tyr Ile Asn Ile Asp Ala Gly Thr Phe Ser Pro Tyr Glu His Gly Glu Val Phe Val Leu Asn Asp Gly Gly Glu Val Asp Leu Asp Leu Gly Asn Tyr Glu Arg Phe Leu Asp 11e Asn Leu Tyr Lys Asp Asn Asn Ile Thr Thr Gly Lys Ile Tyr Gln His Val Ile Asn Lys Glu Arg Arg Gly Asp Tyr Leu Gly Lys Thr Val Gln Val Val Pro His lle Thr Asp Ala Val Gln Glu Trp Val Met Asn Gln Ala Lys Val Pro Val Asp Gly Asn Lys Glu Glu Pro Gln Ile Cys Val

He	Glu	Leu	G1 y	Gly	Thr	He	Gly	Asp	He	Glu	Gly	Met	Pro	Phe	Val
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Glu	Ala	Phe	Arg	Gln	Phe	Gln	Phe	Lys	Ala	Lys	Arg	Glu	Asn	Phe	Cys
				165					170					175	
Asn	lle	His	Val	Ser	Leu	Val	Pro	G1n	Leu	Ser	Ala	Thr	Gly	Glu	Gln
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Lys	Thr	Lys	Pro	Thr	Gln	Asn	Ser	Val	Arg	Ala	Leu	Arg	Gly	Leu	Gly
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Leu	Ser	Pro	Asp	Leu	He	Val	Cys	Arg	Ser	Ser	Thr	Pro	He	Glu	Met
	210					215					220				
Ala	Val	Lys	Glu	Lys		Ser	Met	Phe	Cys	His	Val	Asn	Pro	Glu	Gln
225					230					235					240
Val	He	Cys	He		Asp	Val	Ser	Ser		Tyr	Arg	Va]	Pro		Leu
				245					250					255	
Leu	Glu	Glu		Ser	He	Val	Lys		Phe	Lys	Glu	Arg		His	Leu
_			260			~		265		ъ.			270		
Pro	He		Asp	Ser	Ala	Ser		Leu	Leu	Phe	Lys		Arg	Asn	Met
A 1		275	T	61		1	280		т 1	C	C .	285	41.		v i
Ala		Arg	lyr	Glu	Arg	Leu	GIn	Lys	11e	Cys		11e	Ala	Leu	vai
	290					295					300				
G1 v	Lvs	Tyr	Thr	Lvs	Leu	Arg	Asp	Cvs	Tvr	Ala	Ser	Val	Phe	Lvs	Ala
305	13 , 13	• , •		.5,0	310	6		0,0	- , -	315				2,0	320
	Glu	His	Ser	Ala		Ala	lle	Asn	His		Leu	Asn	Leu	Met	
				325					330	•				335	-
He	Asp	Ser	He	Asp	Leu	Glu	Lys	lle	Thr	Glu	Thr	Glu	Asp	Pro	Val
			340					345					350		
Lys	Phe	His	Glu	Ala	Trp	Gln	Lys	Leu	Cys	Lys	Ala	Asp	Gly	He	Leu
		355					360					365			
Val	Pro	Gly	Gly	Phe	Gly	He	Arg	Gly	Thr	Leu	Gly	Lys	Leu	Gln	Ala
	370					375					380				
Пe	Ser	Trp	Ala	Arg	Thr	Lys	Lys	He	Pro	Phe	Leu	Gly	Val	Cys	Leu
385					390					395					400
Gly	Met	Gln	Leu	Ala	Val	He	Glu	Phe	Ala	Arg	Asn	Cys	Leu	Asn	Leu
				405					410					415	
Lvc	Acn	Ala	Acn	Sor	The	C1n	Dho	Ana	Dro	Acn	Λla	Pro	Val	Dro	Lou

			420					425					430		
Val	He	Asp	Met	Pro	Glu	His	Asn	Pro	Gly	Asn	Leu	Gly	Gly	Thr	Met
		435					440					445			
Arg	Leu	Gly	He	Arg	Arg	Thr	Val	Phe	Lys	Thr	Glu	Asn	Ser	He	Leu
	450					455					460				
Arg	Lys	Leu	Tyr	G1 y	Asp	Val	Pro	Phe	He	Glu	Glu	Arg	His	Arg	His
465					470					475					480
Arg	Phe	Glu	Val	Asn	Pro	Asn	Leu	Ile	Lys	Gln	Phe	Glu	Gln	Asn	Asp
				485					490					495	
Leu	Ser	Phe	Val	Gly	Gln	Asp	Val	Asp	Gly	Asp	Arg	Met	Glu	lle	He
			500					505					510		
Glu	Leu	Ala	Asn	His	Pro	Tyr	Phe	Val	Gly	Val	Gln	Phe	His	Pro	Glu
		515					520					525			
Phe	Ser	Ser	Arg	Pro	Met	Lys	Pro	Ser	Pro	Pro	Tyr	Leu	Gly	Leu	Leu
	530					535					540				
Leu	Ala	Ala	Thr	Gly	Asn	Leu	Asn	Ala	Tyr	Leu	Gln	Gln	Gly	Cys	Lys
545					550					555					560
Leu	Ser	Ser	Ser	Asp	Arg	Tyr	Ser	Asp	Ala	Ser	Asp	Asp	Ser	Phe	Ser
				565					570					575	
Glu	Pro	Arg	lle	Ala	Glu	Leu	Glu	Ile	Ser						
			580					585							

<210> 3210

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3210

Thr Pro Gly Pro Phe Ser Tyr Thr Lys Ala Ser Val Val Leu Phe Leu Pro Asn Pro Arg Pro Asn lle Phe Lys Leu His Ser Lys Glu Gln Leu Ala Glu Cys His Gln Tyr Leu Gln Ser Asn Met Arg Trp Asp Phe Ser Phe Ala Ile Lys Thr Arg Met Leu Phe Leu Pro Cys Ser Asp Asn Val <210> 3211 <211> 757 <212> PRT <213> Homo sapiens <400> 3211 Met Gln Lys Ser Leu Arg Pro Ile Gly Leu Leu Arg Ala Gln Ser Leu Glu Trp Phe Tyr Asn Asn Val Lys Ser Arg Phe Glu Arg Phe Gly Ser Ala Lys Val Leu Lys Asn Leu Tyr Arg Lys His Arg Leu Glu Ser Gly Ala Cys Phe Asp 11e Leu Gly Gly Ser Leu Phe Glu Ser Asn Leu Glu Asn Glu Gly Ser lle Ser Gly Ser Asp Ser Thr Phe Tyr Arg Gln Ser Glu Gly His Ser Val Met Asp Thr Leu Ala Val Ala Leu Arg Val Ala Glu Glu Ala He Glu Glu Ala He Ser Lys Ala Glu Ala Tyr Gly Asp Ser Leu Asp Lys Gln Asn Glu Ala Ser Tyr Leu Arg Asp His Lys Glu

Glu Leu Thr Glu Glu Leu Ala Thr Thr 11e Leu Gln Lys 11e 11e Arg

Lys Gln Lys Ser Lys Ser Glu Gln Gln Val Glu Glu Glu Pro Gly Trp

145					150					155					160
Pro	His	Pro	Gln	Ser	Cys	Ser	Thr	Lys	Val	Ala	Asp	Glu	Gly	Thr	Ser
				165					170					175	
Ala	Ser	Pro	Gly	Gly	Tyr	Arg	Ala	Pro	Ala	Ala	Leu	Trp	Arg	Ser	Gln
			180					185					190		
Ser	Ala	Phe	Ser	11e	Thr	Gly	Glu	Glu	Ala	Leu	Lys	Thr	Pro	Pro	Val
		195					200					205			
Glu	Ala	Pro	Ser	Arg	Gln	Pro	Arg	Asp	Gln	Gly	Gln	His	Pro	Arg	Ala
	210					215					220				
Glu	Ser	Ala	Leu	Pro	Ser	Trp	Lys	Ser	Val	Asp	Arg	Leu	Asp	Glu	Thr
225					230					235					240
Asn	Leu	Ala	Pro	Val	Leu	61n	Ser	Pro	Asp	Gly	Asn	Trp	Val	Ala	Leu
				245					250					255	
Lys	Asp	Gly	Ala	Pro	Pro	Pro	Thr	Arg	Leu	Leu	Ala	Lys	Pro	Lys	Ser
			260					265					270		
Gly	Thr	Phe	Gln	Ala	Leu	Glu	Val	Ala	Ser	Ser	Val	Ala	Ser	Ala	Tyr
		275					280					285			
Asp	Glu	Met	Gly	Ser	Asp	Ser	Glu	Glu	Asp	Phe	Asp	Trp	Ser	Glu	Ala
	290					295					300				
Leu	Ser	Lys	Leu	Cys	Pro	Arg	Ser	Arg	Ala	Leu	Pro	Arg	Asn	Pro	Gln
305					310					315					320
Pro	Gln	Pro	Thr	Gln	Ala	Gln	Ser	Ser	Asp	Gln	Gly	Pro	He	Ala	Ala
				325					330					335	
Ser	Pro	Ser	Ser	Ala	Leu	Ser	Pro	Asn	Pro	Glu	Ala	Met	Cys	Ser	Asp
			340					345					350		
Ser	Glu	Thr	Ser	Ser	Ala	Gly	Ser	Ser	Arg	Glu	Val	Gly	His	Gln	Ala
		355					360					365			
Arg	Leu	Ser	Trp	Leu	Gln	Arg	Lys	Ala	Pro	Arg	Asn	Pro	Ala	Ala	Glu
	370			•		375					380				
Lys	Met	Arg	Leu	His	Gly	Glu	Leu	Asp	Val	Asn	Phe	Asn	Pro	Gln	Leu
385					390					395					400
Ala	Ser	Arg	Glu	Thr	Ser	Asp	Ser	Ser	Glu	Pro	Glu	Glu	Ala	Pro	His
				405					410					415	
Thr	Thr	Asp	Arg	Arg	Ala	Arg	Arg	Trp	Arg	Arg	Ala	Arg	Leu	Gly	Ser
			420					425					430		
6.1	C1	Due	Can	1	C1	D	C	C	D	C 1-	41	Cln	Leu	Λ ν. σ	1 000

		435					440					445			
Leu	Asp	Thr	His	Gln	Val	Ser	Asp	Asp	Leu	Ser	Glu	Thr	Asp	He	Ser
	450					455					460				
Asn	Glu	Лlа	Arg	Asp	Pro	Gln	Thr	Leu	Thr	Asp	Thr	Thr	Glu	Glu	Lys
465					470					475					480
Arg	Arg	Asn	Arg	Leu	Tyr	Glu	Leu	Ala	Met	Lys	Met	Ser	Glu	Lys	Glu
				485					490					495	
Thr	Ser	Ser	Gly	Glu	Asp	Gln	Glu	Ser	Glu	Pro	Lys	Thr	Glu	Ser	Glu
			500					505					510		
Asn	Gln	Lys	Glu	Ser	Leu	Ser	Ser	Glu	Asp	Asn	Ser	Gln	Ser	Val	Gln
		515					520					525			
Glu	Glu	Leu	Lys	Lys	Lys	Phe	Ser	Ala	Val	Ser	Leu	Cys	Asn	Пe	Ser
	530					535					540				
Thr	Glu	Val	Leu	Lys	Val	Ile	Asn	Ala	Thr	Glu	Glu	Leu	lle	Ala	G1 y
545					550					555					560
Ser	Thr	Gly	Pro	Trp	Glu	Ser	Pro	Gln	Val	Pro	Pro	Asp	Arg	Gln	Lys
				565					570					575	
Gly	Met	Phe	Pro	Arg	Gly	Thr	Asp	Gln	Val	Arg	Leu	Asp	Glu	Gln	Leu
			580					585					590		
Thr	Ser	Leu	Glu	Glu	Asn	Val	Tyr	Leu	Ala	Ala	Gly	Thr	Val	Tyr	Gly
		595					600					605			
Leu	Glu	Thr	Gln	Leu	Thr	Glu	Leu	Glu	Asp	Ala	Ala	Arg	Cys	He	His
	610					615					620				
Ser	Gly	Thr	Asp	Glu	Thr	His	Leu	Ala	Asp	Leu	Glu	Asp	Gln	Val	Ala
625					630					635					640
Thr	Ala	Ala	Ala	Gln	Val	His	His	Ala	Glu	Leu	Gln	He	Ser	Asp	He
				645					650					655	
Glu	Ser	Arg	lle	Ser	Ala	Leu	Thr	lle	Ala	Gly	Leu	Asn	He	Ala	Pro
			660					665					670		
Cys	Val	Arg	Phe	Thr	Arg	Arg	Arg	Asp	Gln	Lys	Gln	Arg	Thr	Gln	Val
		675					680					685			
Gln	Thr	He	Asp	Thr	Ser	Arg	Gln	GIn	Arg	Arg	Lys	Leu	Pro	Ala	Pro
	690					695					700				
Pro	Val	Lys	Ala	G1u	Lys	He	Glu	Thr	Ser	Ser	Val	Thr	Thr	He	Lys
705					710					715					720
Thr	Pho	Acn	Hic	Acr	Pho	116	Lan	Gle	G1v	Sar	Sor	Thr	Aen	Arc	Thr

Lys Glu Arg Lys Gly Thr Thr Lys Asp Leu Met Glu Pro Ala Leu Glu Ser Ala Val Met Tyr <210> 3212 <211> 714 <212> PRT <213> Homo sapiens <400> 3212 Met Leu His Leu Lys Val Gln Phe Leu Asp Asp Ser Gln Lys 11e Phe Val Val Asp Gln Lys Ser Ser Gly Lys Ala Leu Phe Asn Leu Ser Cys Ser His Leu Asn Leu Ala Glu Lys Glu Tyr Phe Gly Leu Glu Phe Cys Ser His Ser Gly Asn Asn Val Trp Leu Glu Leu Leu Lys Pro Ile Thr Lys Gln Val Lys Asn Pro Lys Glu Ile Val Phe Lys Phe Met Val Lys Phe Phe Pro Val Asp Pro Gly His Leu Arg Glu Glu Leu Thr Arg Tyr Leu Phe Thr Leu Gln Ile Lys Lys Asp Leu Ala Leu Gly Arg Leu Pro Cys Ser Asp Asn Cys Thr Ala Leu Met Val Ser His 11e Leu Gln Ser Glu Leu Gly Asp Phe His Glu Glu Thr Asp Arg Lys His Leu Ala Gln Thr Arg Tyr Leu Pro Asn Gln Asp Cys Leu Glu Gly Lys Ile Met His Phe His Gln Lys His Tle Gly Arg Ser Pro Ala Glu Ser Asp Tle Leu

Leu Leu Asp Ile Ala Arg Lys Leu Asp Met Tyr Gly lle Arg Pro His

			180					185					190		
Pro	Ala	Ser 195	Asp	Gly	Glu	Gly	Met 200	Gln	Ile	His	Leu	Ala 205	Val	Ala	His
Met	Gly	Val	Leu	Val	Leu	Arg	Gly	Asn	Thr	Lys	He	Asn	Thr	Phe	Asn
	210					215					220				
Trp	Ala	Lys	He	Arg	Lys	Leu	Ser	Phe	Lys	Arg	Lys	His	Phe	Leu	lle
225					230					235					240
Lys	Leu	His	Ala	Asn	Ile	Leu	Va]	Leu	Cys	Lys	Asp	Thr	Leu	Glu	Phe
				245					250					255	
Thr	Met	Ala	Ser	Arg	Asp	Ala	Cys	Lys	Ala	Phe	Trp	Lys	Thr	Cys	Val
			260					265					270		
Glu	Tyr		Ala	Phe	Phe	Arg		Ser	Glu	Glu	Pro	Lys	Ser	Lys	Pro
		275		_	_		280		_			285		0.1	
Lys		Leu	Leu	Cys	Ser		Gly	Ser	Ser	Phe		Tyr	Ser	Gly	Arg
Tha	290	A 20.00	Cln	Lou	Lau	295	Т., ъ	C1	120	Lua	300	Ana	Lau	Lva	Som
305	GIH	Arg	0111	reu	310	GIU	1 y 1	Gry	AI g	315	Gly	Arg	Leu	Lys	320
	Pro	Phe	Glu	Arg		His	Tvr	Pro	Ser		Tvr	His	Glu	Arg	
Boa			014	325	23,0		- , -		330	0.11.	- , -			335	
Cys	Arg	Ser	Ser	Pro	Asp	Leu	Leu	Ser	Asp	Val	Ser	Lys	G1n	Val	Glu
			340					345					350		
Asp	Leu	Arg	Leu	Ala	Tyr	Gly	Gly	Gly	Tyr	Tyr	Gln	Asn	Val	Asn	G1 y
		355					360					365			
Val	His	Ala	Ser	Glu	Pro	Val	Leu	Glu	Ser	Arg	Arg	Arg	Asn	Ser	Ala
	370					375					380				
Leu	Glu	Val	Thr	Phe	Ala	Thr	Glu	Leu	Glu	His	Ser	Lys	Pro	Glu	Ala
385					390					395					400
Asp	Pro	Thr	Leu		His	Gln	Ser	Gln		Ser	Ser	Ser	Phe		Phe
	-			405		-			410	В		ь.		415	
He	Tyr	Met		Pro	Val	Phe	Asn		Glu	Pro	Asn	Pro		Pro	Asp
Dwa	A 20.00	A a.s.	420	Dha	Con	Clu	A 22 cr	425	San	Lau	Sar	San	430	Cln	The
1.10	vid	435	116	rne	ser	oju	440	Se.r	961.	r.e.n	261	Ser 445	ine	9111	1111
Ser	Cvs		Phe	Ser	Glv	Asn		Met	Ser	He	Tvr	Ser	G1 v	Leu	Thr
	450	,-			3	455					460		- 3		

Ser	Lys	Val	Arg	Pro	Ala	Lys	Gln	Leu	Thr	Tyr	Thr	Asp	Val	Pro	Tyr
465					470					475					480
Ile	Pro	Cys	Thr	Gly	Gln	Gln	Val	Gly	lle	Met	Pro	Pro	Gln	Val	Phe
				485					490					495	
Phe	Tyr	Val	Asp	Lys	Pro	Pro	Gln	Val	Pro	Arg	Trp	Ser	Pro	11e	Arg
			500					505					510		
Ala	Glu	Glu	Arg	Thr	Ser	Pro	His	Ser	Tyr	Val	Glu	Pro	Thr	Ala	Met
		515					520					525			
Lys	Pro	Ala	Glu	Arg	Ser	Pro	Arg	Asn	lle	Arg	Met	Lys	Ser	Phe	Gln
	530					535					540				
Gln	Asp	Leu	Gln	Val	Leu	Gln	Glu	Ala	lle	Ala	Arg	Thr	Ser	Gly	Arg
545					550					555					560
Ser	Asn	11e	Asn	Val	Gly	Leu	Glu	Glu	Glu	Asp	Pro	Asn	Leu	Glu	Asp
				565					570					575	
Ala	Phe	Val	Cys	Asn	lle	Gln	Glu	Gln	Thr	Pro	Lys	Arg	Ser	Gln	Ser
			580					585					590		
Gln	Ser	Asp	Met	Lys	Thr	Ile	Arg	Phe	Pro	Phe	Gly	Ser	Glu	Phe	Arg
		595					600					605			
Pro	Leu	Gly	Pro	Cys	Pro	Ala	Leu	Ser	His	Lys	Ala	Asp	Leu	Phe	Thr
	610					615					620				
Asp	Met	Phe	Ala	Glu	Gln	Glu	Leu	Pro	Ala	Val	Leu	Met	Asp	G1n	Ser
625					630					635					640
Thr	Ala	Glu	Arg	Tyr	Val	Ala	Ser	Glu	Ser	Ser	Asp	Ser	Glu	Ser	Glu
				645					650					655	
He	Leu	Lys	Pro	Asp	Tyr	Tyr	Ala	Leu	Tyr	Gly	Lys	Glu	He	Arg	Ser
			660					665					670		
Pro	Met	Ala	Arg	lle	Arg	Leu	Ser	Ser	Gly	Ser	Leu	Gln	Leu	Asp	Glu
		675					680					685			
Glu	Asp	Glu	Asp	Ala	Tyr	Phe	Asn	Thr	Pro	Thr	Ala	Glu	Asp	Arg	Thr
	690					695					700				
Ser	Leu	Lys	Pro	Cys	Asn	Tyr	Phe	Leu	Ala						
705					710										

<210> 3213 <211> 393 <212> PRT <213> Homo sapiens <400> 3213 Met Glu Gln Cys Ala Cys Val Glu Arg Glu Leu Asp Lys Val Leu Gln Lys Phe Leu Thr Tyr Gly Gln His Cys Glu Arg Ser Leu Glu Glu Leu Leu His Tyr Val Gly Gln Leu Arg Ala Glu Leu Ala Ser Ala Ala Leu Gln Gly Thr Pro Leu Ser Ala Thr Leu Ser Leu Val Met Ser Gln Cys Cys Arg Lys Ile Lys Asp Thr Val Gln Lys Leu Ala Ser Asp His Lys Asp lle His Ser Ser Val Ser Arg Val Gly Lys Ala Ile Asp Arg Asn Phe Asp Ser Glu Ile Cys Gly Val Val Ser Asp Ala Val Trp Asp Ala Arg Glu Gln Gln Gln Ile Leu Gln Met Ala Ile Val Glu His Leu Tyr Gln Gln Gly Met Leu Ser Val Ala Glu Glu Leu Cys Gln Glu Ser Thr Leu Asn Val Asp Leu Asp Phe Lys Gln Pro Phe Leu Glu Leu Asn Arg Ile Leu Glu Ala Leu His Glu Gln Asp Leu Gly Pro Ala Leu Glu Trp Ala Val Ser His Arg Gln Arg Leu Leu Glu Leu Asn Ser Ser Leu Glu Phe Lys Leu His Arg Leu His Phe Ile Arg Leu Leu Ala Gly Gly Pro Ala Lys Gln Leu Glu Ala Leu Ser Tyr Ala Arg His Phe Gln Pro

Phe Ala Arg Leu His Gln Arg Glu Ile Gln Val Met Met Gly Ser Leu

Val Tyr Leu Arg Leu Gly Leu Glu Lys Ser Pro Tyr Cys His Leu Leu

Asp Ser Ser His Trp Ala Glu Ile Cys Glu Thr Phe Thr Arg Asp Ala 260 265 Cys Ser Leu Leu Gly Leu Ser Val Glu Ser Pro Leu Ser Val Ser Phe 275 280 285 Ala Ser Gly Cys Val Ala Leu Pro Val Leu Met Asn Ile Lys Ala Val 295 Ile Glu Gln Arg Gln Cys Thr Gly Val Trp Asn His Lys Asp Glu Leu 310 315 Pro Ile Glu Ile Glu Leu Gly Met Lys Cys Trp Tyr His Ser Val Phe 330 335 325 Ala Cys Pro Ile Leu Arg Gln Gln Thr Ser Asp Ser Asn Pro Pro Ile 340 345 Lys Leu Ile Cys Gly His Val Ile Ser Arg Asp Ala Leu Asn Lys Leu 355 360 365 lle Asn Gly Gly Lys Leu Lys Cys Pro Tyr Cys Pro Met Glu Gln Asn 370 375 380 Pro Ala Asp Gly Lys Arg Ile Ile Phe 390

<210> 3214

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3214

Met Thr Gly Phe Lys Ala Ser Lys Asn Arg Val Thr Leu Leu Ser Asp 1 5 10 15

Thr Asn Thr Ala Ala Asp Leu Lys Leu Lys Pro Val Leu Thr Ala His
20 25 30

Ser Glu Asn Leu Arg Ile Leu Lys Asn Cys Ala Lys Ser Thr Val Pro 35 40 45

Met Cys Asn Lys Ala Leu Met Ala Ala Cys Leu Phe Thr Ile Ser Phe 50 55 60

Thr Glu Tyr Leu Lys Pro Thr Thr Glu Asn Tyr Cys Ser Gly Lys Lys
65 70 75 80

Ile Leu Phe Lys Ile Val Leu Leu Phe Asp Asn Gly Pro Gly His Pro 90 Arg Ala Leu Met Glu Val Cys Lys Glu Met Asn Ala Val Phe Met Pro 100 105 110 Ala Asn Thr Thr Pro Val Leu Tyr Ser Met Asp His Arg Val Ile Leu 120 125 Thr Phe Lys Ser Tyr Tyr Leu Arg Asn Lys Phe Cys Lys Ala Ile Ala 130 135 140 Ala Thr His Ser Tyr Ser Cys Asp Gly Ser Gly Gln Ser Lys Leu Lys 145 150 155 160 Thr

<210> 3215

<211> 352

<212> PRT

<213> Homo sapiens

<400> 3215

Met Asn Thr 11e Val Phe Asn Lys Leu Ser Gly Ala Val Leu Phe Glu
1 5 10 15

Asp Gly Gly Ala Ser Glu Arg Glu Arg Gly Gly Arg Pro Tyr Ser Gly
20 25 30

Val Leu Asp Ser Pro His Ala Arg Pro Glu Val Gly 11e Pro Asp Gly 35 40 45

Pro Pro Leu Lys Asp Asn Leu Gly Leu Arg His Arg Arg Thr Gly Ala 50 55 60

Arg Gln Asn Gly Gly Lys Val Arg His Lys Arg Gln Ala Leu Gln Asp
65 70 75 80

Met Ala Arg Pro Leu Lys Gln Trp Leu Tyr Lys His Arg Asp Asn Pro
85 90 95

Tyr Pro Thr Lys Thr Glu Lys lle Leu Leu Ala Leu Gly Ser Gln Met 100 105 110

Thr Leu Val Gln Val Ser Asn Trp Phe Ala Asn Ala Arg Arg Leu 115 120 125

Lys	Asn	Thr	Val	Arg	Gln	Pro	Asp	Leu	Ser	Trp	Ala	Leu	Arg	Ile	Lys
	130					135					140				
Leu	Tyr	Asn	Lys	Tyr	Val	Gln	Gly	Asn	Ala	Glu	Arg	Leu	Ser	Val	Ser
145					150					155					160
Ser	Asp	Asp	Ser	Cys	Ser	Glu	Asp	G1 y	Glu	Asn	Pro	Pro	Arg	Thr	His
				165					170					175	
Met	Asn	Glu	Gly	Gly	Tyr	Asn	Thr	Pro	Val	His	His	Pro	Val	He	Lys
			180					185					190		
Ser	Glu	Asn	Ser	Val	Ile	Lys	Ala	Gly	Val	Arg	Pro	Glu	Ser	Arg	Ala
		195					200					205			
Ser	Glu	Asp	Tyr	Val	Ala	Pro	Pro	Lys	Tyr	Lys	Ser	Ser	Leu	Leu	Asn
	210					215					220				
Arg	Tyr	Leu	Asn	Asp	Ser	Leu	Arg	His	Val	Met	Ala	Thr	Asn	Thr	Thr
225					230					235					240
Met	Met	Gly	Lys	Thr	Arg	Gln	Arg	Asn	His	Ser	Gly	Ser	Phe	Ser	Ser
				245					250					255	
Asn	Glu	Phe	Glu	Glu	Glu	Leu	Val	Ser	Pro	Ser	Ser	Ser	Glu	Thr	Glu
			260					265					270		
Gly	Asn	Phe	Val	Tyr	Arg	Thr	Asp	Thr	Leu	Glu	Asn	Gly	Ser	Asn	Lys
		275					280					285			
Gly	Glu	Ser	Ala	Ala	Asn	Arg	Lys	Gly	Pro	Ser	Lys	Asp	Asp	Thr	Tyr
	290					295					300				
Trp	Lys	Glu	lle	Asn	Ala	Ala	Met	Ala	Leu	Thr	Asn	Leu	Ala	Gln	Gly
305					310					315					320
Lys	Asp	Lys	Leu	Gln	Gly	Thr	Thr	Ser	Cys	lle	Ile	Gln	Lys	Ser	Ser
				325					330					335	
His	He	Ala	Glu	Val	Lys	Thr	Val	Lys	Val	Pro	Leu	Val	Gln	Gln	Phe
			340					345					350		

<210> 3216

<211> 1284

<212> PRT

<213> Homo sapiens

<400> 3216

Met	His	Val	Phe	Ile	Val	Gly	Met	Ser	Leu	Ser	Ser	Val	Thr	Leu	Ala
1				5					10					15	
Ser	Ala	Leu	Gln	Val	Arg	Gly	Glu	Ala	Leu	Ser	Glu	G1u	Glu	Ile	Trp
			20					25					30		
Ser	Leu	Leu	Phe	Leu	Ala	Ala	Glu	Gln	Leu	Leu	Glu	Asp	Leu	Arg	Asn
		35					40					45			
Asp	Ser	Ser	Asp	Tyr	Va]	Val	Cys	Pro	Trp	Ser	Ala	Leu	Leu	Ser	Ala
	50					55					60				
Ala	Gly	Ser	Leu	Ser	Phe	Gln	G1 y	Arg	Val	Ser	His	Ile	Glu	Ala	Ala
65					70					75					80
Pro	Phe	Lys	Ala	Pro	Glu	Leu	Leu	Gln	Gly	Gln	Ser	Glu	Asp	Glu	Gln
				85					90					95	
Pro	Asp	Ala	Ser	Gln	Pro	Leu	Gln	Leu	Cys	Glu	Pro	Leu	His	Ser	He
			100					105					110		
Leu	Leu	Thr	Met	Cys	Glu	Asp	Gln	Pro	His	Arg	Arg	Cys	Thr	Leu	Gln
		115					120					125			
Ser	Val	Leu	Glu	Ala	Cys	Arg	Val	His	Glu	Lys	Glu	Val	Ser	Val	Tyr
	130					135					140				
Pro	Ala	Pro	Ala	Gly	Leu	His	Ile	Arg	Arg	Leu	Val	Gly	Leu	Val	Leu
145					150					155					160
Gly	Thr	Ile	Ser	Glu	Val	G] u	Lys	Arg	Val	Val	Glu	Glu	Ser	Ser	Ser
				165					170					175	
Val	Gln	Gln	Asn	Arg	Ser	Tyr	Leu	Leu	Arg	Lys	Arg	Leu	Arg	Gly	Thr
			180					185					190		
Ser	Ser	Glu	Ser	Pro	Ala	Ala	Gln	Ala	Pro	Glu	Cys	Leu	His	Pro	Cys
		195					200					205			
Arg	Val	Ser	Glu	Arg	Ser		Glu	Thr	Gln	Ser	Ser	Pro	Glu	Pro	His
	210					215					220				
	Ser	Thr	Leu	Thr		Ser	His	Cys	Ser		Leu	Val	Asn	Arg	
225					230					235					240
Leu	Pro	Gly	Ala		Pro	Gln	Asp	G1n		Ala	Gly	Arg	Arg		Ser
				245					250		_			255	
Ser	Gly	Ser		His	Ser	Ala	Ala	Asp	Ser	Ser	Trp	Pro		Thr	Pro
	~ -		260	ъ.		0.7		265			D.		270		
Ser	GIn		G1y	Phe	Leu	Gln		Arg	Ser	Lys	Phe		Arg	Pro	Glu
		275					280					285			

Phe	Ile	Leu	Leu	Ala	Gly	Glu	Ala	Pro	Met	Thr	Leu	His	Leu	Pro	Gly
	290					295					300				
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305					310					315					320
Cys	Val	Val	Leu	Leu	Asn	Gly	Gln	His	Leu	Glu	Val	Lys	Cys	Asp	Val
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Glu	Ser	Thr	Val	Gly	Ala	Val	Phe	Asn	Ala	Val	Thr	Ser	Phe	Ala	Asn
			340					345					350		
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		355					360					365			
Phe	Phe	Phe	Leu	Asp	Ser	Glu	Thr	Arg	Leu	Cys	Lys	Ile	Ala	Pro	Glu
	370					375					380				
G1 y	Trp	Arg	Glu	Gln	Pro	Gln	Lys	Thr	Ser	Met	Asn	Thr	Phe	Thr	Leu
385					390					395					400
Phe	Leu	Arg	Ile	Lys	Phe	Phe	Val	Ser	His	Tyr	Gly	Leu	Leu	Gln	His
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Ser	Leu	Thr	Arg	His	Gln	Phe	Tyr	Leu	Gln	Leu	Arg	Lys	Asp	Ile	Leu
			420					425					430		
Glu	Glu	Arg	Leu	Tyr	Cys	Asn	Glu	Glu	Ile	Leu	Leu	Gln	Leu	Gly	Val
		435					440					445			
Leu	Ala	Leu	Gln	Ala	Glu	Phe	Gly	Asn	Tyr	Pro	Lys	Glu	Val	Glu	Ser
	450					455					460				
Lys	Pro	Tyr	Phe	His	Val	Glu	Asp	Tyr	lle	Pro	Ala	Ser	Leu	He	Glu
465					470					475					480
Arg	Met	Thr	Ala	Leu	Arg	Val	Gln	Val	Glu	Val	Ser	Glu	Met	His	Arg
				485					490					495	
Leu	Ser	Ser	Ala	Leu	Trp	Gly	Glu	Asp	Ala	Glu	Leu	Glu	Phe	Leu	Arg
			500					505					510		
Val	Thr	Gln	Gln	Leu	Pro	Glu	Tyr	Gly	Val	Leu	Val	His	Gln	Val	Phe
		515					520					525			
Ser	Glu	Lys	Arg	Arg	Pro	Glu	Glu	Glu	Met	Ala	Leu	Gly	Ile	Cys	Ala
	530					535					540				
Lys	Gly	Val	lle	Val	Tyr	Glu	Val	Lys	Asn	Asn	Ser	Arg	11e	Ala	Met
545					550					555					560
Leu	۸rg	Phe	Gln	Trp	Arg	Glu	Thr	Gly	Lys	He	Ser	Thr	Tyr	Gln	Lys
				565					570					575	

Lys	rne	1111	580	1111	ser	ser	vai	585	GIY	Lys	Lys	HIS	590	Pne	vai
Thr	Asp	Ser	Ala	Lys	Thr	Ser	Lys	Tyr	Leu	Leu	Asp	Leu	Cys	Ser	Ala
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Gln	His	Gly	Phe	Asn	Ala	Gln	Met	Gly	Ser	Gly	Gln	Pro	Ser	His	Val
	610					615					620				
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His	Gln	Ala	Arg	Ser	Lys	Pro	Leu	lle	Trp	He	Gln	Arg	Leu	Ser	Cys
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Ser	Glu	Asn	Glu	Leu	Phe	Val	Ser	Arg	Leu	Gln	Gly	Ala	Ala	Gly	Gly
			660					665					670		
Leu	Leu	Ser	Thr	Ser	Met	Asp	Asn	Phe	Asn	Val	Asp	Gly	Ser	Lys	Glu
		675					680					685			
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	690					695					700				
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Ser	Gly	Pro	Pro		Gln	Ser	Met	His		Gly	Ser	Lys	Asn		Arg
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Arg	Lys	Ser		He	Ala	Glu	Pro		Arg	Glu	He	Val		Val	Thr
,			740	Б			0.1	745		D1			750		
Leu	Lys		Asp	Pro	His	Arg		Phe	61 y	Phe	Val		Asn	Glu	GIy
C1	т	755	C1	C1	A 1 -	Λ	760	C1	т 1	DI	7.1	765	C	7.1	7.1
GIU	770	ser	GIY	GIN	Ala		Pro	GIY	116	Pne		Ser	Ser	11e	116
Pro		Gly	Pro	A10	Glu	775	A16	Lva	The	316	780	Dago	C1	C1	C1.5
785	Ory	Oly	110	Ма	790	Lys	ма	LyS	1111	795	Lys	110	01 y	Gry	800
	Leu	Ala	Leu	Asn	His	He	Ser	Leu	Glu		Phe	Thr	Phe	Asn	
	130.0	211 Ci	1,00	805	1113	110	50,1	1,00	810	013	THE	1111	1110	815	MCL
Ala	Val	Arg	Met		G1n	Asn	Ser	Pro		Asn	11e	Glu	Len		He
			820		· · · ·		001	825	пор	71.511	110	014	830	.110	,110
Ser	Gln	Ser		Glv	Val	G1 v	G] v		Asn	Pro	Asp	Glu		Lvs	Asn
		835			-		840					845		, .	,
G1 y	Thr		Asn	Ser	Gly	Val		Ser	Thr	Asp	He		Ser	Phe	Gly

	850					855					860		•		
Tyr	Gln	Gly	Ser	Leu	Ser	Ser	His	Thr	Gln	Asp	Gln	Asp	Arg	Asn	Thr
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Glu	Glu	Leu	Asp	Met	Ala	Gly	Val	Gln	Ser	Leu	Val	Pro	Arg	Leu	Arg
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His	Gln	Leu	Ser	Phe	Leu	Pro	Leu	Lys	Gly	Ala	Gly	Ser	Ser	Cys	Pro
			900					905					910		
Pro	Ser	Pro	Pro	Glu	He	Ser	Ala	Gly	Glu	lle	Tyr	Phe	Val	Glu	Leu
		915					920					925			
Val	Lys	Glu	Asp	Gly	Thr	Leu	Gly	Phe	Ser	Val	Thr	Gly	Gly	Ile	Asn
	930					935					940				
Thr	Ser	Val	Pro	Tyr	Gly	Gly	He	Tyr	Val	Lys	Ser	He	Val	Pro	Gly
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Gly	Pro	Ala	Ala	Lys	Glu	G1y	Gln	lle	Leu	Gln	Gly	Asp	Arg	Leu	Leu
				965					970					975	
GIn	Val	Asp	Gly	Val	lle	Leu	Cys	Gly	Leu	Thr	His	Lys	Gln	Ala	Val
			980					985					990		
Gln	Cys	Leu	Lys	Gly	Pro	G1 y	Gln	Val	Ala	Arg	Leu	Val	Leu	Glu	Arg
		995					1000					1005			
		Pro	Arg	Ser	Thr	Gln	Gln	Cys	Pro	Ser	Ala	Asn	Asp	Ser	Met
	1010]	1015					1020				
		Glu	Arg			Val	Ser	Leu			Ala	Leu	Pro		
Gly 102	Asp 5				1030				-	1035]	1040
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Gly 1023 Pro Leu	Asp 5 Ser Lys	Ser Lys	Cys Asn 1060	Val 1045 Ala	1030 Ser Asn	Val Gly	Thr	Asp Gly 1065	G1y 1050 Phe	Pro Ser	Lys Phe	Phe Val	Glu I Gln 1070	Val 1055 Met	l040 Lys Glu
Gly 1023 Pro Leu	Asp 5 Ser Lys Glu	Ser Lys Ser	Cys Asn 1060	Val 1045 Ala	1030 Ser Asn	Val Gly Leu	Thr Leu Lys	Asp Gly 1065	G1y 1050 Phe	Pro Ser	Lys Phe Val	Phe Val Arg	Glu I Gln	Val 1055 Met	l040 Lys Glu
Gly 1023 Pro Leu Lys	Asp Ser Lys Glu	Ser Lys Ser 1075	Cys Asn 1060 Cys	Val 1045 Ala Ser	1030 Ser Asn His	Val Gly Leu	Thr Leu Lys 1080	Asp Gly 1065 Ser	Gly 1050 Phe Asp	Pro Ser Leu	Lys Phe Val	Phe Val Arg 1085	Glu J Gln 1070 11e	Val 1055 Met Lys	Lys Glu Arg
Gly 102: Pro Leu Lys Leu	Asp Ser Lys Glu Phe	Ser Lys Ser 1075	Cys Asn 1060 Cys	Val 1045 Ala Ser	1030 Ser Asn His	Val Gly Leu Ala	Thr Leu Lys 1080	Asp Gly 1065 Ser	Gly 1050 Phe Asp	Pro Ser Leu	Lys Phe Val	Phe Val Arg 1085	Glu I Gln 1070	Val 1055 Met Lys	Lys Glu Arg
Gly 102: Pro Leu Lys	Asp Ser Lys Glu Phe	Ser Lys Ser 1075 Pro	Cys Asn 1060 Cys Gly	Val 1045 Ala Ser Gln	Asn His	Val Gly Leu Ala	Thr Leu Lys 1080 Glu	Asp Gly 1065 Ser Glu	Gly 1050 Phe Asp	Pro Ser Leu Gly	Lys Phe Val Ala	Phe Val Arg 1085	Glu J Gln 1070 Ile Ala	Val 1055 Met Lys Ala	Lys Glu Arg
Gly 1023 Pro Leu Lys Leu	Asp 5 Ser Lys Glu Phe 1090	Ser Lys Ser 1075 Pro	Cys Asn 1060 Cys Gly	Val 1045 Ala Ser Gln	Asn His Pro	Val Gly Leu Ala	Thr Leu Lys 1080 Glu	Asp Gly 1065 Ser Glu	Gly 1050 Phe Asp Asn	Pro Ser Leu Gly	Lys Phe Val Ala	Phe Val Arg 1085	Glu J Gln 1070 11e	Val 1055 Met Lys Ala	Glu Arg Gly Phe
Gly 1029 Pro Leu Lys Leu Asp 1109	Asp 5 Ser Lys Glu Phe 1090 11e	Ser Lys Ser 1075 Pro	Cys Asn 1060 Cys Gly Leu	Val 1045 Ala Ser Gln	Asn His Pro Val	Val Gly Leu Ala 1095 Asn	Thr Leu Lys 1080 Glu Gly	Asp Gly 1065 Ser Glu	Gly 1050 Phe Asp Asn	Pro Ser Leu Gly Thr	Lys Phe Val Ala 1100 Glu	Phe Val Arg 1085 He	Glu IGIn 1070 IIe Ala Leu	Val 1055 Met Lys Ala	Columbia Col
Gly 1029 Pro Leu Lys Leu Asp 1109	Asp 5 Ser Lys Glu Phe 1090 11e	Ser Lys Ser 1075 Pro	Cys Asn 1060 Cys GIy Leu Leu	Val 1045 Ala Ser Gln	Asn His Pro Val	Val Gly Leu Ala 1095 Asn	Thr Leu Lys 1080 Glu Gly	Asp Gly 1065 Ser Glu Arg	Gly 1050 Phe Asp Asn	Pro Ser Leu Gly Thr	Lys Phe Val Ala 1100 Glu	Phe Val Arg 1085 He	Glu Gln 1070 Ile Ala Leu Val	Val 1055 Met Lys Ala	Columbia Col

1140 1145 1150 Trp Gln Thr Pro Glu Leu Ser Ala Asp Lys Glu Phe Thr Arg Ala Thr 1160 Cys Thr Asp Ser Cys Thr Ser Pro IIe Leu Asp Gln Glu Asp Ser Trp 1170 1175 1180 Arg Asp Ser Ala Ser Pro Asp Ala Gly Glu Gly Leu Gly Leu Arg Pro 1190 1195 Glu Ser Ser Gln Lys Ala Ile Arg Glu Ala Gln Trp Gly Gln Asn Arg 1205 1210 1215 Glu Arg Pro Trp Ala Ser Ser Leu Thr His Ser Pro Glu Ser His Pro 1220 1225 His Leu Cys Lys Leu His Gln Glu Arg Asp Glu Ser Thr Leu Ala Thr 1240 Ser Leu Glu Lys Asp Val Arg Gln Asn Cys Tyr Ser Val Cys Asp He 1255 1260 Met Arg Leu Gly Arg Tyr Ser Phe Ser Ser Pro Leu Thr Arg Leu Ser 1270 1275 1280 Thr Asp Ile Phe

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<212> PRT

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Met Gly Val Ala Gly Arg Asn Arg Pro Gly Ala Ala Trp Ala Val Leu 1 5 10 15

Leu Leu Leu Leu Leu Pro Pro Leu Leu Leu Leu Ala Gly Ala Val 20 25 30

Pro Pro Gly Arg Gly Arg Ala Ala Gly Pro Gln Glu Asp Val Asp Glu
35 40 45

Cys Ala Gln Gly Leu Asp Asp Cys His Ala Asp Ala Leu Cys Gln Asn 50 55 60

Thr Pro Thr Ser Tyr Lys Cys Ser Cys Lys Pro Gly Tyr Gln Gly Glu

65					70					75					80
Gly	Arg	Gln	Cys	Glu	Asp	He	Asp	Glu	Cys	Gly	Asn	Glu	Leu	Asn	Gly
				85					90					95	
Gly	Cys	Val	His	Asp	Cys	Leu	Asn	He	Pro	Gly	Asn	Tyr	Arg	Cys	Thr
			100					105					110		
Cys	Phe	Asp	Gly	Phe	Met	Leu	Ala	His	Asp	Gly	His	Asn	Cys	Leu	Asp
		115					120					125			
Val	Asp	Glu	Cys	Leu	Glu	Asn	Asn	Gly	Gly	Cys	Gln	His	Thr	Cys	Val
	130					135					140				
Asn	Val	Met	Gly	Ser	Tyr	Glu	Cys	Cys	Cys	Lys	Glu	Gly	Phe	Phe	Leu
145					150					155					160
Ser	Λsp	Asn	Gln	His	Thr	Cys	He	His	Arg	Ser	Glu	Glu	Gly	Leu	Ser
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Cys	Met	Asn		Asp	His	Gly	Cys		His	He	Cys	Lys		Ala	Pro
			180					185					190		
Arg	Gly		Val	Ala	Cys	Glu		Arg	Pro	Gly	Phe		Leu	Ala	Lys
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Asn		Arg	Asp	Cys	He		Thr	Cys	Asn	His		Asn	Gly	Gly	Cys
0.1	210					215			<i>a</i>	ь	220	0		0	
	HIS	Ser	Cys	Asp		Thr	Ala	Asp	GIy		Glu	Cys	Ser	Cys	
225 D	C1	т	1	М.,	230	ть	Δ	C1	4	235	C	1	C1	Α	240
Pro	GIN	Tyr	Lys		HIS	Inr	Asp	61 y		Ser	Cys	Leu	Glu	Arg	GIU
Aan	Thu	V c. 1	Lau	245	Vol	Tha	C1	Can	250	Tha	Than	Con	Val	255	Aan
ASP	1111	vai	260	Gju	vai	1111	Gju	265	ASII	1111	1111	261	270	Val	ASP
Glv	Acn	lve		Val	lve	Δra	Ara		Lau	Mot	Glu	Thr		Ala	Val
Ory	nap	275	m g	1 (1)	Lys	Mg	280	Leu	Leu	Met	Oju	285	Cys	AIG	, 41
Asn	Asn		Glv	Cvs	Asn	Arg		Cvs	lvs	Asn	Thr		Thr	Gly	Val
	290	01,	O1,	Cyc	пор	295		0,0	БуО		300	001		O. J.	
His		Ser	Cvs	Pro	Val		Phe	Thr	Leu	Gln		Asp	Glv	Lys	Thr
305	·		•		310	•				315		•	•	•	320
	Lys	Asp	He	Asp		Cys	Gln	Thr	Arg		Gly	G1 y	Cys	Asp	
-	•	•		325		-			330		•	•	-	335	
Phe	Cys	Lys	Asn	He	Val	Gly	Ser	Phe	Asp	Cys	Gly	Cys	Lys	Lys	G1 y
			340					345					350		
Phe	Lvs	Leu	Leu	Thr	Asp	Glu	Lvs	Ser	Cvs	Gln	Asp	Val	Asp	Glu	Cvs

	355					360					365			
Leu	Asp	Arg	Thr	Cys	Asp	His	Ser	Cys	Ile	Asn	His	Pro	Gly	Thr
370					375					380				
Ala	Cys	Ala	Cys	Asn	Arg	Gly	Tyr	Thr	Leu	Tyr	Gly	Phe	Thr	His
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Gly	Asp	Thr	Asn	Glu	Cys	Ser	lle	Asn	Asn	Gly	Gly	Cys	Gln	Gln
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Cys	Val	Asn	Thr	Val	Gly	Ser	Tyr	Glu	Cys	Gln	Cys	His	Pro	Gly
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Lys	Leu	His	Trp	Asn	Lys	Lys	Asp	Cys	Val	Glu	Val	Lys	Gly	Leu
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Pro	Thr	Ser	Val	Ser	Pro	Arg	Val	Ser	Leu	His	Cys	Gly	Lys	Ser
450					455					460				
Gly	Gly	Asp	Gly	Cys	Phe	Leu	Arg	Cys	His	Ser	Gly	11e	His	Leu
				470					475					480
Ser	Gly	Leu	Gln	Gly	Ala	Tyr	Ser	Val	Thr	Cys	Gly	Ser	Ser	Ser
			485					490					495	
Leu	Arg	Asn	Lys	Gln	G1n	Lys	Ser	Asn	Asp	Ser	Ala	Phe	Gly	Asp
		500					505					510		
Thr	Thr	lle	Arg	Thr	Ser	Val	Thr	Phe	Lys	Leu	Asn	G]u	Gly	Lys
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Pro	Glu	Lys	His		Ser	Val	Lys	Glu		Phe	Arg	Tyr	Val	
æ.						0.1		,			15	0.1		560
Thr	Cys	Ser		GIy	Lys	GIn	Val			Ala	Pro	Gly	-	Pro
TI.	D				121	7.1	T-1	0.0		DI	6.1	•		TC1
Inr	Pro		Glu	Met	Pne	11e		vai	61u	Phe	Glu		GIU	Inr
C1	1		V = 1	ть	A 1	C		A	1	C	C		V . 1	1
GIN		Glu	vai	ın.r	Ala		Cys	Asp	Leu	26L		116	val	Lys
Tha		Luc	A 20.00	Lau	A 20.00		110	11.	A 20.00	Mat		Λ	1	. ۲۸
	GTU	LyS	Arg	Leu		Lys	ма	116	Arg		reu	Arg	Lys	АТа
	Δκα	61.	Cle	Dho		Lov	Cln	Lov	Sor		Mot	Aco	Lou	Acr
1115	лт В	010	9111		1115	reu	OIH	ren		01 y	me t	ASH	ren	640
Ala	lve	lve	Pro		Aro	Thr	Ser	Glu		Glo	Ala	Glu	Ser	
	370 Ala Gly Cys Lys Pro 450 Gly Ser Leu Thr 530 Pro Thr Thr Gln Thr 610 His	Leu Asp 370 Ala Cys Gly Asp Cys Val Lys Leu 435 Pro Thr 450 Gly Gly Leu Arg Thr Thr 515 Ser Leu 530 Pro Glu Thr Cys Thr Pro Gln Lys Thr Pro Gln Lys 595 Thr Glu 610 His Arg	Leu Asp Arg 370 Asp Ala Ala Asp Thr Cys Val Asn 420 Lys Leu His 435 Pro Thr Ser Asp Ser Gly Leu Leu Arg Asn 500 Thr Thr 11e 515 Ser Leu Lys 530 Uss Ser Thr Cys Ser Thr Cys Ser Thr Pro Lys 580 Glu Lys Gln Lys 580 Gln Lys Glu Thr Glu Lys Gln Lys Glu His Arg Glu	Leu Asp Arg Thr 370 Yal Cys Ala Cys Ala Cys Gly Asp Thr Asp Cys Val Asp Thr Cys Leu His Trp 420 Yal 450 Yal Gly Asp Gly Ser Ala Yal 485 Asp Gly Leu Arg Asp Arg 500 Yal Asp Arg Ser Asp Lys Asp Ser Leu Lys Asp Ser Leu Lys Asp Thr Cys Ser Ser 565 Thr Folia Yal 580 Yal Yal 580	Leu Asp Arg Thr Cys 370	Leu Asp Thr Cys Asp 370 Y Y Asp Asp Ala Cys Asp Arg Asp Asp Asp Asp Asp Thr Asp Asp Asp Thr Val Asp Asp Thr Val Asp Asp Thr Asp Asp Asp Asp Asp Asp <	Leu Asp Arg Thr Cys Asp His 370	Leu Asp Arg Thr Cys Asp His Ser 370	Leu Asp Arg Thr Cys Asp His Ser Cys 370	Leu Asp Arg Thr Cys Asp His Ser Cys I he 370 V Asp Asp Gly Thr Leu 395 Ala Cys Asp Gly Gly Thr Leu 395 Gly Asp Thr Asp Gly Ser 11e Asp Asp Gly Asp Thr Asp Gly Ser 11e Asp Asp Cys Val Asp Thr Val Gly Ser Tyr Gly Cys Lys Leu His Tyr Asp Cys Val Asp Cys Val Asp Cys Val Asp Cys Int Asp Cys Asp Asp Cys Asp Asp Cys Asp Asp <td< td=""><td>Leu Asp Arg Thr Cys Asp His Ser Cys 11e Asp 370 Tr Cys Asp Arg Arg Tyr Thr Leu Tyr Ala Cys Asp Asp Arg Arg Tyr Thr Leu Tyr Asp Asp Asp Asp Cys Ser Tyr Asp Asp Gly Cys Val Asp Thr Asp Gly Gly Ser Tyr Glu Cys Gly Cys Leu His Trp Asp Lys Asp Tyr Gly Cys Gly Lys Leu His Trp Asp Lys Asp Asp Cys His Asp Leu His Asp Asp Asp Asp Asp Asp Asp Asp Arg Asp Asp Asp Asp Asp Asp Asp Asp Asp Asp Arg Asp Asp Arg Asp Asp Arg Asp lt;</td><td>Leu Asp Arg Thr Cys Asp His Ser Cys 11e Asp His 380 His Asp Asp Thr Asp Asp Thr Asp Asp</td></td<> <td>Company Any office of the company Cys. And Stan Stan Stan Stan Stan Stan Stan Stan</td> <td>Company Asp of the company Asp of the company</td>	Leu Asp Arg Thr Cys Asp His Ser Cys 11e Asp 370 Tr Cys Asp Arg Arg Tyr Thr Leu Tyr Ala Cys Asp Asp Arg Arg Tyr Thr Leu Tyr Asp Asp Asp Asp Cys Ser Tyr Asp Asp Gly Cys Val Asp Thr Asp Gly Gly Ser Tyr Glu Cys Gly Cys Leu His Trp Asp Lys Asp Tyr Gly Cys Gly Lys Leu His Trp Asp Lys Asp Asp Cys His Asp Leu His Asp Asp Asp Asp Asp Asp Asp Asp Arg Asp Asp Asp Asp Asp Asp Asp Asp Asp Asp Arg Asp Asp Arg Asp Asp Arg Asp	Leu Asp Arg Thr Cys Asp His Ser Cys 11e Asp His 380 His Asp Asp Thr Asp Asp Thr Asp Asp	Company Any office of the company Cys. And Stan Stan Stan Stan Stan Stan Stan Stan	Company Asp of the company

				645					650					655	
Gly	Val	Gly	Gln	Gly	His	Ala	Glu	Asn	Gln	Cys	Gly	Leu	Cys	Gln	Pro
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Gly	Glu	Tyr	Ser	Ala	Asp	Gly	Phe	Ala	Pro	Cys	Gln	Leu	Cys	Ala	Leu
		675					680					685			
Gly	Thr	Phe	Gln	Pro	Glu	Ala	Gly	Arg	Thr	Ser	Cys	Phe	Pro	Cys	Gly
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Gly	Gly	Leu	Ala	Thr	Lys	His	Gln	Gly	Ala	Thr	Ser	Phe	Gln	Asp	Cys
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Glu	Thr	Arg	Val	Gln	Cys	Ser	Pro	Gly	His	Phe	Tyr	Asn	Thr	Thr	Thr
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His	Arg	Cys	He	Arg	Cys	Pro	Val	Gly	Thr	Tyr	Gln	Pro	Glu	Phe	Gly
			740					745					750		
Lys	Asn	Asn	Cys	Val	Ser	Cys	Pro	Gly	Asn	Thr	Thr	Thr	Asp	Phe	Asp
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Gly	Ser	Thr	Asn	lle	Thr	Gln	Cys	Lys	Asn	Arg	Arg	Cys	Gly	Gly	Glu
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785					790					795					800
Tyr	Pro	Ala	Asn		Glu	Cys	Thr	Trp		He	Asn	Pro	Pro		Lys
				805					810					815	
Arg	Arg	lle		He	Val	Val	Pro		He	Phe	Leu	Pro	He	Glu	Asp
			820	_				825			_		830		
Asp	Cys		Asp	Tyr	Leu	Val		Arg	Lys	Thr	Ser		Ser	Asn	Ser
	mı	835		0.1	m.	0	840	m	m	6.1		845 B		. 1	731
Val			lyr	Glu	Thr			Ihr	lyr	Glu			He	Ala	Phe
T)	850		C	,	,	855		3.1	C1	DI	860			C)	C I
	Ser	Arg	Ser	Lys		Leu	irp	116	GIN		Lys	ser	Asn	GJU	
865	C	A 1	Λ	C1	870	C1	C1	D	Т	875	Tl	Т	A an	C 1	880
ASI	ser	ATA	Arg		rne	GIII	GIV	rro		vai	1111	Tyr	Asp		Asp
T	Cln	C1	Lau	885	C1	Aan	11.	Val	890	Acn	Cly	Ara	Lan	895	Ala
ıyr	GIH	Glu		116	Giu	Asp	116		Arg	ASP	GIY	AIg	Leu	LVI	ATA
Sor	Glu	Ace	900 His	Cln	G1 ii	116	Lou	905	Acn	lve	lve	ا ما	910 11e	Lve	Ala
ושני	oru	915	111.5	0111	oru	116	920	LYS	nəp	Γìο	レッシ	925	116	rìs	nia
l.eu	Phe		Val	Leu	Ala	His		Gln	Asn	Tvr	Phe		Tvr	Thr	Ala

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 145
 150
 155
 160

 11e Glu Ile Arg Asn Gly Pro Tyr Glu Thr Ser Arg Met Met Gly Arg
 165
 170
 175

Ala His IIe Gln Phe Leu Asn Phe Ser Thr Glu Pro Asn His Asp Tyr

Phe Ser Gly Ser Glu Leu Pro Ser Ser Leu Leu Ser Thr Ser His Glu

			180					185					190		
Thr	Thr	Val	Tyr	Phe	His	Ser	Asp	His	Ser	Gln	Asn	Arg	Pro	Gly	Phe
		195					200					205			
Lys	Leu	Glu	Tyr	Gln	Ala	Tyr	Glu	Leu	Gln	Glu	Cys	Pro	Asp	Pro	Glu
	210					215					220				
Pro	Phe	Ala	Asn	Gly	Ile	Val	Arg	Gly	Ala	Gl y	Tyr	Asn	Val	Gly	Gln
225					230					235					240
Ser	Val	Thr	Phe	Glu	Cys	Leu	Pro	Gly	Tyr	Gln	Leu	Thr	Gly	His	Pro
				245					250					255	
Val	Leu	Thr	Cys	Gln	His	G1 y	Thr	Asn	Arg	Asn	Trp	Asp	His	Pro	Leu
		١	260					265					270		
Pro	Lys	Cys	Glu	Val	Pro	Cys	Gly	Gly	Asn	He	Thr	Ser	Ser	Asn	Gly
		275					280					285			
Thr	Val	Tyr	Ser	Pro	Gly	Phe	Pro	Ser	Pro	Tyr	Ser	Ser	Ser	Gln	Asp
	290					295					300				
Cys	Val	Trp	Leu	Ile	Thr	Val	Pro	Ile	Gly	His	Gly	Val	Arg	Leu	Asn
305					310					315					320
Leu	Ser	Leu	Leu	Gln	Thr	Glu	Pro	Ser	Gly	Asp	Phe	lle	Thr	Ile	Trp
				325					330					335	
Asp	Gly	Pro	Gln	Gln	Thr	Ala	Pro	Arg	Leu	Gly	Val	Phe	Thr	Arg	Ser
			340					345					350		
Met	Ala		Lys	Thr	Val	Gln		Ser	Ser	Asn	Gln	Val	Leu	Leu	Lys
		355					360					365			
Phe		Arg	Asp	Ala	Ala		Gly	Gly	He	Phe		He	Ala	Phe	Ser
	370			_		375					380				
	His	Cys	Arg	Tyr	Phe	Asn	Gln	Lys	Ser		Lys	Leu	Asp	Phe	
385					390					395					400
Pro	Ser	Ser	Thr		Gly	Gln	Leu	Cys		Thr	Leu	His	Arg		Leu
D				405	0.3	D.			410					415	
Pro	His	Leu			Gln	Phe	Leu		Leu						
			420					425							

<210> 3219 <211> 292

<212> PRT <213> Homo sapiens <400> 3219 Met Ser Arg Ile Pro Leu Gly Lys Val Leu Leu Arg Asn Val Ile Arg His Thr Asp Ala His Asn Lys Ile Gln Glu Glu Ser Asp Met Trp Lys Ile Arg Glu Leu Glu Lys Gln Met Glu Asp Ala Tyr Arg Gly Thr Lys Arg Lys Met Leu Pro Ser Ser Ser Ser Arg Met Arg Ser Asp Gly Phe Asp Glu Glu Ser Gln Arg Tyr Tyr Trp Arg Pro Lys Asn Glu Ile Ser Gly Thr Leu Glu Asp Asp Phe Leu Lys Ala Lys Ser Trp Asn Lys Lys Phe Tyr Asp Tyr Glu Ala Asn Met Pro Asp Arg Trp Gly His Ser Gly Tyr Lys Glu Leu Tyr Pro Glu Glu Phe Glu Thr Asn Ser Asp Gln Gln Asp Ile Thr Asn Gly Lys Lys Thr Ser Pro Gln Val Lys Ser Ser Thr His Glu Ser Arg Lys His Lys Lys Ser Lys Lys Ser His Lys Lys Lys Gln Lys Lys Arg Ser His Lys Lys Gln Lys Lys Ser Lys Lys Glu Ala Thr Asp Ile Thr Ala Asp Ser Ser Ser Glu Phe Ser Glu Glu Thr Gly Ala Ser Gly Thr Arg Lys Gly Lys Gln Pro His Lys Arg Lys Lys Ser Arg Lys Lys Ser Leu Lys Lys Pro Ala Leu Phe Leu Glu Ala Glu

Ser Asn Thr Ser His Ser Asp Asp Ser Ala Ser Ser Ser Ser Glu Glu

Ser Glu Glu Arg Asp Thr Lys Lys Thr Lys Arg Lys Lys Arg Glu Lys

Lys Ala His Thr Ser Val Ala Asn Asn Glu Ile Gln Glu Arg Thr Asn 260 265 Lys Arg Thr Asn Trp Lys Val Ala Thr Asp Glu Arg Ser Ala Glu Ser 275 280 285 Ser Glu Asp Asp 290 <210> 3220 <211> 1023 <212> PRT <213> Homo sapiens <400> 3220 Met Ser Leu Gly Val Ala Ala Ile Asn Gln Ala Ile Lys Glu Gly Lys 1 5 10 Ala Ala Gln Thr Glu Arg Val Leu Arg Asn Pro Ala Val Ala Leu Arg 25 Gly Val Val Pro Asp Cys Ala Asn Gly Tyr Gln Arg Ala Leu Glu Ser 35 40 45 Ala Met Ala Lys Lys Gln Arg Pro Ala Asp Thr Ala Phe Trp Val Gln 55 His Asp Met Lys Asp Gly Thr Ala Tyr Tyr Phe His Leu Gln Thr Phe 70 75 65 80 Gln Gly Ile Trp Glu Gln Pro Pro Gly Cys Pro Leu Asn Thr Ser His 85 90 95 Leu Thr Arg Glu Glu Ile Gln Ser Ala Val Thr Lys Val Thr Ala Ala 100 105 110 Tyr Asp Arg Gln Gln Leu Trp Lys Ala Asn Val Gly Phe Val Ile Gln 120 125

His Ser His Phe Leu Arg Thr Trp Leu Pro Ala Val lle Lys Ile Gln
145

Ala His Trp Arg Gly Tyr Arg Gln Arg Lys lle Tyr Leu Glu Trp Leu

Leu Gln Ala Arg Leu Arg Gly Phe Leu Val Arg Gln Lys Phe Ala Glu

				165					170					175	
Gln	Tyr	Phe	Lys	Ala	Asn	Leu	Asp	Ala	lle	Ile	Lys	lle	Gln	Ala	Trp
			180					185					190		
Ala	Arg	Met	Trp	Ala	Ala	Arg	Arg	G1n	Tyr	Leu	Arg	Arg	Leu	His	Tyr
		195					200					205			
Phe	Gln	Lys	Asn	Val	Asn	Ser	11e	Val	Lys	lle	Gln	Ala	Phe	Phe	Arg
	210					215					220				
Ala	Arg	Lys	Ala	Gln	Asp	Asp	Tyr	Arg	Ile	Leu	Val	His	Ala	Pro	His
225					230					235					240
Pro	Pro	Leu	Ser	Val	Val	Arg	Arg	Phe	Ala	His	Leu	Leu	Asn	Gln	Ser
				245			•		250					255	
Gln	Gln	Asp	Phe	Leu	Ala	Glu	Ala	Glu	Leu	Leu	Lys	Leu	Gln	Glu	Glu
			260					265					270		
Val	Val	Arg	Lys	He	Arg	Ser	Asn	Gln	Gln	Leu	Glu	Gln	Asp	Leu	Asn
		275					280					285			
lle	Met	Asp	Ile	Lys	lle	Gly	Leu	Leu	Val	Lys	Asn	Arg	lle	Thr	Leu
	290					295					300				
Gln	Glu	Val	Val	Ser	His	Cys	Lys	Lys	Leu	Thr	Lys	Arg	Asn	Lys	Glu
305					310					315					320
Gln	Leu	Ser	Asp	Met	Met	Val	Leu	Asp	Lys	Gln	Lys	Gly	Leu	Lys	Ser
				325					330					335	
Leu	Ser	Lys	Glu	Lys	Arg	Gln	Lys	Leu	Glu	Ala	Tyr	Gln	His	Leu	Phe
			340					345					350		
Tyr	Leu	Leu	Gln	Thr	Gln	Pro	lle	Tyr	Leu	Ala	Lys	Leu	11e	Phe	Gln
		355					360					365			
Met		Gln	Asn	Lys	Thr	Thr	Lys	Phe	Met	Glu	Ala	Val	He	Phe	Ser
	370					375					380				
Leu	Tyr	Asn	Tyr	Ala	Ser	Ser	Arg	Arg	Glu	Ala	Tyr	Leu	Leu	Leu	Gln
385					390					395					400
Leu	Phe	Lys	Thr		Leu	G1n	Glu	Glu	He	Lys	Ser	Lys	Val	Glu	Gln
				405					410					415	
Pro	Gln	Asp		Val	Thr	Gly			Thr	Va]	Val	Arg	Leu	Val	Val
			420					425					430		
Arg	Phe		Arg	Asn	Gly	Arg		Gln	Ser	Ala	Leu		G1u	He	Leu
		435					440					445	_		
GIv	Lvs	Val	He	Gln	Asp	Val	Leu	Glu	Asp	Lvs	Val	Leu	Ser	Val	His

	450					455					460				
Thr	Asp	Pro	Val	His	Leu	Tyr	Lys	Asn	Trp	Ile	Asn	Gln	Thr	Glu	Ala
465					470					475					480
Gln	Thr	Gly	Gln	Arg	Ser	His	Leu	Pro	Tyr	Asp	Val	Thr	Pro	Glu	Gln
				485					490					495	
Ala	Leu	Ser	His	Pro	Glu	Val	Gln	Arg	Arg	Leu	Asp	lle	Ala	Leu	Arg
			500					505					510		
Asn	Leu	Leu	Ala	Met	Thr	Asp	Lys	Phe	Leu	Leu	Ala	lle	Thr	Ser	Ser
		515					520					525			
Val	Asp	Gln	Ile	Pro	Tyr	Gly	Met	Arg	Tyr	Val	Ala	Lys	Val	Leu	Lys
	530					535					540				
Ala	Thr	Leu	Ala	Glu	Lys	Phe	Pro	Asp	Ala	Thr	Asp	Ser	Glu	Val	Tyr
545					550					555					560
Lys	Val	Val	Gly	Asn	Leu	Leu	Tyr	Tyr	Arg	Phe	Leu	Asn	Pro	Ala	Val
				565					570					575	
Val	Ala	Pro	Asp	Ala	Phe	Asp	lle	Va]	Ala	Met	Ala	Ala	Gly	G1 y	Ala
			580					585					590		
Leu	Ala	Ala	Pro	Gln	Arg	His	Ala	Leu	Gly	Ala	Val	Ala	Gln	Leu	Leu
		595					600					605			
Gln	His	Ala	Ala	Ala	Gly	Lys	Ala	Phe	Ser	Gly	Gln	Ser	Gln	His	Leu
	610					615					620				
Arg	Val	Leu	Asn	Asp	Tyr	Leu	Glu	Glu	Thr	His	Leu	Lys	Phe	Arg	Lys
625					630					635					640
Phe	He	His	Arg	Ala	Cys	Gln	Val	Pro	Glu	Pro	Glu	Glu	Arg	Phe	Ala
				645					650					655	
Val	Asp	Glu	Tyr	Ser	Asp	Met	Val	Ala	Val	Ala	Lys	Pro	Met	Val	Tyr
			660					665					670		
He	Thr	Val	Gly	${\tt Glu}$	Leu	Val	Asn	Thr	His	Arg	Leu	Leu	Leu	Glu	His
		675					680					685			
Gln	Asp	Cys	He	Ala	Pro	Asp	His	Gln	Asp	Pro	Leu	His	Glu	Leu	Leu
	690					695					700				
Glu	Asp	Leu	Gly	Glu	Leu	Pro	Thr	He	Pro	Asp	Leu	lle	Gly	Glu	Ser
705					710					715					720
He	Ala	Ala	Asp	Gly	His	Thr	Asp	Leu	Ser	Lys	Leu	Glu	Val	Ser	Leu
				725					730					735	
Thr	Leu	Thr	Asn	Lys	Phe	Glu	Gly	Leu	Glu	Ala	Asp	Ala	Asp	Asp	Ser

			740					745					750		
Asn	Thr	Arg	Ser	Leu	Leu	Leu	Ser	Thr	Lys	Gln	Leu	Leu	Ala	Asp	Ile
		755					760					765			
Ile	Gln	Phe	His	Pro	Gly	Asp	Thr	Leu	Lys	Glu	He	Leu	Ser	Leu	Ser
	770	•				775					780				
Ala	Ser	Arg	Glu	Gln	Glu	Ala	Ala	His	Lys	Gln	Leu	Met	Ser	Arg	Arg
785					790					795					800
Gln	Ala	Cys	Thr	Ala	Gln	Thr	Pro	Glu	Pro	Leu	Arg	Arg	His	Arg	Ser
				805					810					815	
Leu	Thr	Ala	His	Ser	Leu	Leu	Pro	Leu	Ala	Glu	Lys	Gln	Arg	Arg	Val
			820					825					830		
Leu	Arg	Asn	Leu	Arg	Arg	Leu	Glu	Ala	Leu	Gly	Leu	Val	Ser	Ala	Arg
		835					840					845			
Asn	Gly	Tyr	Gln	Gly	Leu	Val	Asp	Glu	Leu	Ala	Lys	Asp	He	Arg	Asn
	850					855					860				
Gln	His	Arg	His	Arg	His	Arg	Arg	Lys	Ala	Glu	Leu	Val	Lys	Leu	Gln
865					870					875					880
Ala	Thr	Leu	Gln	Gly	Leu	Ser	Thr	Lys	Thr	Thr	Phe	Tyr	Glu	Glu	Gln
				885					890					895	
Gly	Asp	Tyr	Tyr	Ser	Gln	Tyr	He	Arg	Ala	Cys	Leu	Asp	His	Leu	Ala
			900					905					910		
Pro	Asp	Ser	Lys	Ser	Ser	Gly	Lys	Gly	Lys	Lys	Gln	Pro	Ser	Leu	His
		915					920					925			
Tyr	Thr	Ala	Ala	Gln	Leu	Leu	Glu	Lys	G1 y	Val	Leu	Val	Glu	He	Glu
	930					935					940				
Asp	Leu	Pro	Ala	Ser	His	Phe	Arg	Asn	Val	He	Phe	Asp	He	Thr	Pro
945					950					955					960
Gly	Asp	Glu	Ala		Lys	Phe	Glu	Val		Ala	Lys	Phe	Leu		Val
				965					970		_			975	
Asp	Met	GJu		Phe	GIn	Leu	His		GIn	Asp	Leu	Leu		Leu	GIn
m	0.1	0.1	980					985	D)			. 1	990	17 1	
lyr	Glu	GI y 995	Val	Ala	Val			Leu	Phe	Asn			Lys	val	Asn
		uuh					1000					1005			
W = 1	Asn		1	11-	DL			۸ .~	1	1			Λ	1	

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<210> 3221
<211> 791
<212> PRT
<213> Homo sapiens
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Met Asp Gly Glu Ser Glu Val Asp Phe Ser Ser Asn Ser Ile Thr Pro
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                                     10
                                                          15
Leu Trp Arg Arg Ser Ile Pro Gln Pro His Gln Leu Leu Gly Arg
             20
                                 25
Ser Lys Pro Arg Pro Gln Ser Tyr Gln Ser Pro Asn Gly Leu Leu 11e
                             40
                                                 45
Thr Asp Phe Pro Val Glu Asp Gly Gly Thr Leu Ser Ala Ala Gln Ile
     50
                         55
Pro Ala Gln Val Pro Thr Ala Ser Asp Ser Arg Thr Val His Arg Ser
                     70
                                         75
Pro Leu Leu Gly Ala Gln Arg Arg Ala Val Ala Asn Gly Gly Thr
                 85
                                     90
Ala Ser Pro Glu Tyr Arg Ala Ala Ser Pro Arg Leu Arg Arg Pro Lys
            100
                                105
                                                    110
Ser Pro Lys Leu Pro Lys Ala Val Pro Gly Gly Ser Pro Lys Ser Pro
                            120
                                                125
Ala Asn Gly Ala Val Thr Leu Pro Ala Pro Pro Pro Pro Val Leu
    130
                        135
Arg Pro Pro Arg Thr Pro Asn Ala Pro Ala Pro Cys Thr Pro Glu Glu
                    150
                                        155
Asp Leu Thr Gly Leu Thr Ala Ser Pro Val Pro Ser Pro Thr Ala Asn
                                    170
                                                         175
                165
Gly Leu Ala Ala Asn Asn Asp Ser Pro Gly Ser Gly Ser Gln Ser Gly
            180
                                185
Arg Lys Ala Lys Asp Pro Glu Arg Gly Leu Phe Pro Gly Pro Gln Lys
                                                205
                            200
Ser Ser Ser Glu Gln Lys Leu Pro Leu Gln Arg Leu Pro Ser Gln Glu
    210
                        215
                                            220
Asn Glu Leu Leu Glu Asn Pro Ser Val Val Leu Ser Thr Asn Ser Pro
```

225					230					235					240
Ala	Ala	Leu	Lys	Val	Gly	Lys	Gln	Gln	He	He	Pro	Lys	Ser	Leu	Ala
				245					250					255	
Ser	Glu	He	Lys	11e	Ser	Lys	Ser	Asn	Asn	Gln	Asn	Val	Glu	Pro	His
			260					265					270		
Lys	Arg	Leu	Leu	Lys	Val	Arg	Ser	Met	Val	Glu	Gly	Leu	Gly	Gly	Pro
		275					280					285			
Leu	Gly	His	Ala	G] y	Glu	Glu	Ser	Glu	Val	Asp	Asn	Asp	Val	Asp	Ser
	290					295					300				
Pro	Gly	Ser	Leu	Arg	Arg	Gly	Leu	Arg	Ser	Thr	Ser	Tyr	Arg	Arg	Ala
305					310					315					320
Val	Val	Ser	Gly	Phe	Asp	Phe	Asp	Ser	Pro	Thr	Ser	Ser	Lys	Lys	Lys
				325					330					335	
Asn	Arg	Met	Ser	Gln	Pro	Val	Leu	Lys	Val	Val	Met	Glu	Asp	Lys	Glu
			340					345					350		
Lys	Phe	Ser	Ser	Leu	Gly	Arg	He	Lys	Lys	Lys	Met	Leu	Lys	Gly	Gln
		355					360					365			
Gly	Thr	Phe	Asp	Gly	Glu	Glu	Asn	Ala	Val	Leu	Tyr	Gln	Asn	Tyr	Lys
	370					375					380				
Glu	Lys	Ala	Leu	Asp	He	Asp	Ser	Asp	Glu	Glu	Ser	Glu	Pro	Lys	Glu
385					390					395					400
Gln															
0.111	Lys	Ser	Asp	Glu	Lys	He	Val	He	His	His	Lys	Pro	Leu	Arg	Ser
0111	Lys	Ser	Asp	Glu 405	Lys	He	Val	He	His 410	His	Lys	Pro	Leu	Arg 415	Ser
				405	Lys Ser				410					415	
				405					410					415	
Thr	Trp	Ser	Gln 420	405 Leu		Ala	Val	Lys 425	410 Arg	Lys	Gly	Leu	Ser 430	415 Gln	Thr
Thr	Trp	Ser	Gln 420	405 Leu	Ser	Ala	Val Arg	Lys 425	410 Arg Glu	Lys	Gly	Leu	Ser 430	415 Gln	Thr
Thr Val	Trp Ser	Ser Gln 435	Gln 420 Glu	405 Leu Glu	Ser	Ala Lys	Val Arg 440	Lys 425 Gln	410 Arg Glu	Lys Ala	Gly Ile	Leu Phe 445	Ser 430 Glu	415 Gln Val	Thr Ile
Thr Val	Trp Ser	Ser Gln 435	Gln 420 Glu	405 Leu Glu	Ser Arg	Ala Lys	Val Arg 440	Lys 425 Gln	410 Arg Glu	Lys Ala	Gly Ile	Leu Phe 445	Ser 430 Glu	415 Gln Val	Thr Ile
Thr Val Ser	Trp Ser Ser 450	Ser Gln 435 Glu	Gln 420 Glu His	405 Leu Glu Ser	Ser Arg	Ala Lys Leu 455	Val Arg 440 Leu	Lys 425 Gln Ser	410 Arg Glu Leu	Lys Ala Glu	Gly Ile Ile 460	Leu Phe 445 Leu	Ser 430 Glu Ile	415 Gln Val Arg	Thr Ile Met
Thr Val Ser	Trp Ser Ser 450	Ser Gln 435 Glu	Gln 420 Glu His	405 Leu Glu Ser	Ser Arg Tyr	Ala Lys Leu 455	Val Arg 440 Leu	Lys 425 Gln Ser	410 Arg Glu Leu	Lys Ala Glu	Gly Ile Ile 460	Leu Phe 445 Leu	Ser 430 Glu Ile	415 Gln Val Arg	Thr Ile Met
Thr Val Ser Phe 465	Trp Ser Ser 450 Lys	Ser Gln 435 Glu Asn	Gln 420 Glu His Ser	405 Leu Glu Ser Lys	Ser Arg Tyr Glu	Ala Lys Leu 455 Leu	Val Arg 440 Leu Ser	Lys 425 Gln Ser	410 Arg Glu Leu Thr	Lys Ala Glu Met 475	Gly Ile Ile 460 Thr	Leu Phe 445 Leu Lys	Ser 430 Glu Ile Thr	415 Gln Val Arg Glu	Thr Ile Met Arg 480
Thr Val Ser Phe 465	Trp Ser Ser 450 Lys	Ser Gln 435 Glu Asn	Gln 420 Glu His Ser	405 Leu Glu Ser Lys	Ser Arg Tyr Glu 470	Ala Lys Leu 455 Leu	Val Arg 440 Leu Ser	Lys 425 Gln Ser	410 Arg Glu Leu Thr	Lys Ala Glu Met 475	Gly Ile Ile 460 Thr	Leu Phe 445 Leu Lys	Ser 430 Glu Ile Thr	415 Gln Val Arg Glu	Thr Ile Met Arg 480
Thr Val Ser Phe 465	Trp Ser Ser 450 Lys	Ser Gln 435 Glu Asn Leu	Gln 420 Glu His Ser	405 Leu Glu Ser Lys Ser 485	Ser Arg Tyr Glu 470	Ala Lys Leu 455 Leu	Val Arg 440 Leu Ser	Lys 425 Gln Ser Asp	410 Arg Glu Leu Thr Val 490	Lys Ala Glu Met 475 Cys	Gly Ile Ile 460 Thr	Leu Phe 445 Leu Lys	Ser 430 Glu Ile Thr	415 Gln Val Arg Glu Lys 495	Thr Ile Met Arg 480 Lys
Thr Val Ser Phe 465	Trp Ser Ser 450 Lys	Ser Gln 435 Glu Asn Leu	Gln 420 Glu His Ser	405 Leu Glu Ser Lys Ser 485	Ser Arg Tyr Glu 470 Asn	Ala Lys Leu 455 Leu	Val Arg 440 Leu Ser	Lys 425 Gln Ser Asp	410 Arg Glu Leu Thr Val 490	Lys Ala Glu Met 475 Cys	Gly Ile Ile 460 Thr	Leu Phe 445 Leu Lys	Ser 430 Glu Ile Thr	415 Gln Val Arg Glu Lys 495	Thr Ile Met Arg 480 Lys

		515					520					525			
Tyr	Val	Lys	Tyr	Cys	Thr	Asn	Glu	Val	Tyr	Gln	Gln	Arg	Thr	Leu	Gln
	530					535					540				
Lys	Leu	Leu	Ala	Thr	Asn	Pro	Ser	Phe	Lys	Glu	Val	Leu	Ser	Arg	He
545					550					555					560
Glu	Ser	His	Glu	Asp	Cys	Arg	Asn	Leu	Pro	Met	He	Ser	Phe	Leu	He
				565					570					575	
Leu	Pro	Met	Gln	Arg	Val	Thr	Arg	Leu	Pro	Leu	Leu	Met	Asp	Thr	Ile
			580					585					590		
Cys	Gln	Lys	Thr	Pro	Lys	Asp	Ser	Pro	Lys	Tyr	Glu	Val	Cys	Lys	Arg
		595					600					605			
Ala	Leu	Lys	Glu	Val	Ser	Lys	Leu	Val	Arg	Leu	Cys	Asn	Glu	Gly	Ala
	610					615					620				
Arg	Lys	Met	Glu	Arg	Thr	Glu	Met	Met	Tyr	Thr	He	Asn	Ser	Gln	Leu
625					630					635					640
Glu	Phe	Lys	He	Lys	Pro	Phe	Pro	Leu	Val	Ser	Ser	Ser	Arg	Trp	Leu
				645					650					655	
Val	Lys	Arg	Gly	Glu	Leu	Thr	Ala	Tyr	Val	Glu	Asp	Thr	Val	Leu	Phe
			660					665					670		
Ser	Arg	Arg	Thr	Ser	Lys	Gln	Gln	Val	Tyr	Phe	Phe	Leu	Phe	Asn	Asp
		675					680					685			
Val	Leu	He	He	Thr	Lys	Lys	Lys	Ser	Glu	Glu	Ser	Tyr	Asn	Val	Asn
	690					695					700				
	Tyr	Ser	Leu	Arg		Gln	Leu	Leu	Va]		Ser	Cys	Asp	Asn	
705					710					715					720
Glu	Leu	Asn	Ser		Pro	Gly	Lys	Asn		Ser	Thr	Met	Leu		Ser
		_		725			_		730					735	
Arg	GIn	Ser		Ala	Ser	His	Leu		Thr	Leu	Thr	Val		Ser	Asn
			740			6.1		745		0.7		6.1	750	0.1	
His	Ala		61u	Lys	Val	Glu		Leu	Leu	Gly	Ala	Glu	Thr	GIn	Ser
6.3		755		'r	9.1	TD1	760	,	6.1		C	765	61	,	р
Glu		Ala	Arg	rp	He		Ala	Leu	Gly	HIS		Ser	GIY	Lys	Pro
D :	770	Λ	Λ :	T1_ ·	C···	775					780				
	Ala	Asp	Arg	ınr		ыу									
785					790										

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<211> 214
<212> PRT
<213> Homo sapiens
<400> 3222
Met Arg Val Ser Met Gln Gln Thr Ala Gln Gly Gly Pro His Gly
                                     10
Gln Arg Arg Asp Ala Asp Leu Arg Pro Ala Pro Pro Lys Leu Pro Val
                                 25
Gln Met Pro Leu Thr Pro Ser Asn Gln Gln Gln Asp Arg His Cys Val
        35
                             40
                                                 45
Arg Lys Val Gly Arg His Pro His Pro Cys Thr Ala Ala Ala Thr Pro
                                             60
                         55
Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln Lys His His
                                         75
Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr Ser Leu Pro
                                     90
Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu Ser Val Ser
                                105
Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val Leu Ala Ser
        115
                            120
                                                125
Val Ser Ile Ala Ser Ser Trp Pro Ser Ser Ala Arg Cys Ser Lys Pro
   130
                        135
Thr Ala Val Glu Ala Asn Val IIe Ala Leu Pro Leu Arg Arg Trp His
                    150
                                        155
Arg Asp Trp Gln Arg Cys His Leu Gly Val Cys Val Leu Ser Leu Arg
                165
                                    170
Val Gln Ala Ser Pro Ala Pro Ala Val Val Leu Gly Pro Gln Met Arg
                                185
Asp His Gly His Glu Asp Gln Pro Pro Arg Gln Pro Leu Pro Ser Ser
                                                205
        195
                            200
Leu Gly Ser Gly Val Phe
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<210> 3222

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<211> 155
<212> PRT
<213> Homo sapiens
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Met Ile Phe Lys Phe Pro Ser Ser Phe Leu Val Leu Trp Ser Leu Leu
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                                     10
                                                          15
Arg Cys Gly Arg Lys Gln Phe Val Ser Cys Ala Glu Gln Phe Arg Ser
                                 25
Pro Gly Ser Leu Ser Pro Gly Pro Lys Pro Pro Arg Arg Glu Ser Phe
         35
                             40
                                                 45
Ser Gly Pro Trp Glu Gln Val Leu Lys Gly Phe Leu Leu Lys Arg Gly
                         55
Arg Gln Pro Ala Val Arg Val Arg Ile Val Val Pro Glu Pro Tyr
                     70
Gly Gln Ser Phe Glu Arg Ile Gly Leu Gly Arg Phe Ser Gly Gln Lys
                                     90
                 85
Arg Leu Ile Ser Ile Leu Gly Ala Leu Ser His Lys Gly Tyr Leu Ile
                                105
Glu Arg Lys Asn Gly Val Cys Gly Ser Phe Ala Pro 11e Ser Lys Trp
        115
                            120
                                                125
Val Asp Ser Gly Cys Lys Gly 11e Phe Ser His Phe Ser Gln Gln Arg
                        135
Lys Ala Phe Ser Ala Lys Ile Leu Lys Gly Glu
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155

<210> 3224

<211> 751

<212> PRT

<213> Homo sapiens

150

<400> 3224

Met	Arg	Leu	Lys	Πle	Ser	Leu	Leu	Lys	Glu	Pro	Lys	His	Gln	Glu	Leu
1				5					10					15	
Val	Ser	Cys	Val	Gly	Trp	Thr	Thr	Ala	Glu	Glu	Leu	Tyr	Ser	Cys	Ser
			20					25					30		
Asp	Asp	His	Gln	He	Val	Lys	Trp	Asn	Leu	Leu	Thr	Ser	Glu	Thr	Thr
		35					40					45			
Gln	lle	Val	Lys	Leu	Pro	Asp	Asp	He	Tyr	Pro	He	Asp	Phe	His	Trp
	50					55					60				
Phe	Pro	Lys	Ser	Leu	Gly	Va1	Lys	Lys	Gln	Thr	Gln	Ala	Glu	Ser	Phe
65					70					75					80
Val	Leu	Thr	Ser	Ser	Asp	Gly	Lys	Phe	His	Leu	lle	Ser	Lys	Leu	Gly
				85					90					95	
Arg	Va]	Glu	Lys	Ser	Val	Glu	Ala	His	Cys	Gly	Ala	Val	Leu	Ala	G1 y
			100					105					110		
Arg	Trp	Asn	Tyr	Glu	G] y	Thr		Leu	Val	Thr	Val		Glu	Asp	Gly
		115					120					125			
Gln		Lys	Ile	Trp	Ser	Lys	Thr	Gly	Met	Leu		Ser	Thr	Leu	Ala
	130			_		135				_	140	_		_	
	Gln	Gly	Thr	Pro		Tyr	Ser	Val	Ala		Gly	Pro	Asp	Ser	
145	12 1	,	T	TI	150	0.1		C1		155	7.1		n		160
Lys	Vai	Leu	lyr		Ala	Gly	Lys	61n		11e	116	Lys	Pro		GIn
D	4	A1.	1	165		C1	т	1	170	112 -	Λ	C1	11.	175	1
Pro	Asn	Ala		vai	Leu	Głn	тр		АТА	nis	ASP	бту	11e 190	116	Leu
Luc	Vo.1	Acn	180	Acn	Sor	Vo.1	Acr	185 Asp	Lou	110	Lòu	Sor		Clv	Clu
rys	vai	195	11 þ	ASII	261	Va]	200	nsp	Leu	116	Leu	205	МТа	Oly	Olu
Asn	Cve		Tyr	Lve	Val	Trp		Ser	Tyr	Glv	Aro		Leu	Tyr	Asn
пор	210	Lys	1) 1	Lys	, (1)	215	пэр	561	1,1	Oly	220	110	1,00	1 3 1	11311
Ser		Pro	His	Glu	His	Pro	He	Thr	Ser	Val		Tro	Ala	Pro	Asp
225	• • • • • • • • • • • • • • • • • • • •				230					235					240
	Glu	Leu	Phe	Ala		Gly	Ser	Phe	His		Leu	Arg	Leu	Cvs	
•				245		·			250					255	•
Lys	Thr	Gly	Trp		Tyr	Ala	Leu	Glu		Pro	Asn	Thr	Gly		Пе
•		-	260		•			265	•				270		
Phe	Asn	lle	Ala	Trp	Ser	He	Asp	Gl y	Thr	Gln	11e	Ala	G1y	Ala	Cys
		275					280					285			

Gly	Asn	G1y	His	Val	Val	Phe	Ala	His	Val	Val	Glu	Gln	His	Trp	Glu
	290					295					300				
Trp	Lys	Asn	Phe	Gln	Val	Thr	Leu	Thr	Lys	Arg	Arg	Ala	Met	Gln	Val
305					310					315					320
Arg	Asn	Val	Leu	Asn	Asp	Ala	Val	Asp	Leu	Leu	Glu	Phe	Arg	Asp	Arg
				325					330					335	
Val	He	Lys	Ala	Ser	Leu	Asn	Tyr	Ala	His	Leu	Val	Val	Ser	Thr	Ser
			340					345					350		
Leu	Gln	Cys	Tyr	Val	Phe	Ser	Thr	Lys	Asn	Trp	Asn	Thr	Pro	He	Ile
		355					360					365			
Phe	Asp	Leu	Lys	Glu	Gly	Thr	Val	Ser	Leu	lle	Leu	Gln	Ala	Glu	Arg
	370					375					380				
His	Phe	Leu	Leu	Val	Asp	Gly	Ser	Ser	He	Tyr	Leu	Tyr	Ser	Tyr	Glu
385					390					395					400
Gly	Arg	Phe	He	Ser	Ser	Pro	Lys	Phe	Pro	Gly	Met	Arg	Thr	Asp	He
				405					410					415	
Leu	Asn	Ala	Gln	Thr	Val	Ser	Leu	Ser	Asn	Asp	Thr	He	Ala	He	Arg
			420					425					430		
Asp	Lys	Ala	Asp	Glu	Lys	He	Ile	Phe	Leu	Phe	Glu	Ala	Ser	Thr	Gly
		435					440					445			
Lys	Pro	Leu	Gly	Asp	Gly	Lys	Phe	Leu	Ser	His	Lys	Asn	Glu	He	Leu
	450					455					460				
Glu	lle	Ala	Leu	Asp	Gln	Lys	Gly	Leu	Thr	Asn	Asp	Arg	Lys	He	Ala
465					470					475					480
Phe	Ile	Asp	Lys	Asn	Arg	Asp	Leu	Cys	lle	Thr	Ser	Val	Lys	Arg	Phe
				485					490					495	
Gly	Lys	Glu	Glu	Gln	He	lle	Lys	Leu	G1 y	Thr	Met	Val	His	Thr	Leu
			500					505					510		
Ala	Trp	Asn	Asp	Thr	Cys	Asn	He	Leu	Cys	Gly	Leu	G]n	Asp	Thr	Arg
		515					520					525			
Phe	lle	Val	Trp	Tyr	Tyr	Pro	Asn	Thr	Val	Tyr	Val	Asp	Arg	Asp	11e
	530					535					540				
Leu	Pro	Lys	Thr	Leu	Tyr	Glu	Arg	Asp	Ala		Glu	Phe	Ser	Lys	Asn
545					550					555					560
Pro	His	He	Val	Ser	Phe	Val	Gly	Asn	Gln	Val	Thr	lle	Arg	Arg	Ala
				565					570					575	

Asp Gly Ser Leu Val His Ile Ser Ile Pro Pro Tyr Pro Ala Ile Leu 580 His Glu Tyr Val Ser Ser Ser Lys Trp Glu Asp Ala Val Arg Leu Cys 600 605 Arg Phe Val Lys Glu Gln Thr Met Trp Ala Cys Leu Ala Ala Met Ala 615 620 Val Ala Asn Arg Asp Met Thr Thr Ala Glu lle Ala Tyr Ala Ala Ile 625 630 635 640 Gly Glu Ile Asp Lys Val Gln Tyr Ile Asn Ser lle Lys Asn Leu Pro 645 650 655 Ser Lys Glu Ser Lys Met Ala His Ile Leu Leu Phe Ser Gly Asn Ile 665 660 Gln Glu Ala Glu Ile Val Leu Leu Gln Ala Gly Leu Val Tyr Gln Ala 675 680 685 Ile Gln 11e Asn Ile Asn Leu Tyr Asn Trp Glu Arg Ala Leu Glu Leu 695 Ala Val Lys Tyr Lys Thr His Val Asp Thr Val Leu Ala Tyr Arg Gln 710 715 Lys Phe Leu Glu Thr Phe Gly Lys Gln Glu Thr Asn Lys Arg Tyr Leu 725 730 735 His Tyr Ala Glu Gly Leu Gln 11e Asp Trp Glu Lys 11e Lys Ala 740 745 750

<210> 3225

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3225

Met Gly Leu Lys Ser His Val Leu Pro Ala Pro Asn Ser Gln Gly Gln
1 5 10 15

Gly Ser Leu Cys Ile Phe Val Tyr Val Thr Ser Tyr Met Asp Tyr Ile
20 25 30

Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly Leu Asn Lys Gln

Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp Gly Trp Leu Met Val Leu Val Gln Gln Leu His Gly Gly Arg Gly His Val Leu Asp Pro Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser Gln Asp Gly Cys Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg Arg Gly Gly Gly Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe Tyr Gln Lys Val Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro Leu His Ile Phe Thr <210> 3226 <211> 163 <212> PRT <213> Homo sapiens <400> 3226 Met Ala Phe Gly Glu Pro Pro Ser Gly His Ser Thr Arg His Arg Thr Leu His Gly Leu Ser Phe His Thr Ala Met Gly Met Ala Trp Ser Leu His Tyr Gln Gly Gln Gly Gly Thr Leu Cys Leu Val Gly Val Ser Thr Pro Ser His Asp Lys Ala Val Leu Gln Gly Leu Pro His Phe Ser Val Asn Leu Gly Val Gln Pro Ser Ala Leu Ala Gly Arg Arg Gly Asp Ala Ser Cys Pro Ser Ser Trp Arg Ser Ala Asp Pro Thr Val Ser Pro Asn

Leu Gly Ala Pro Gly Gly Pro Asn Ala Ile Asp Ala Leu His Gly Glu

105 100 110 Gln Leu Gly Leu Phe Leu Arg Thr Lys Met Gly Arg Asp Pro Lys Asp 120 125 Val His Gly Leu Thr Pro Ala Leu Cys Gly Pro Cys Leu Ala Gly Leu 130 135 140 Pro Ser Ser His Ser Pro Gln Phe Ser Cys Asn Thr Ala Pro Leu Lys 150 160 145 155 Met Leu Ser <210> 3227 <211> 390 <212> PRT <213> Homo sapiens <400> 3227 Met Leu Ser Phe Ser Arg Asp Arg Leu Pro Ser Gly Arg Arg Val Ser 1 10 Gly Lys Cys Pro Pro Pro Pro Leu Gly Met Ala Val Gly Arg Gly Gly 25 Ser Gly Cys Pro Glu Glu Gly Ser Gly Arg Lys Leu Glu Leu Leu Glu

Ser Gln Leu Pro Ala Glu Arg Ala Arg Glu Glu Ala Gly Pro Ser Val 50 Arg Arg Pro Arg Asp Lys Leu His Lys Pro Lys Ala Thr Gln Thr Glu 70 75 Val Lys Pro Ser Val Arg Phe Asn Leu Arg Thr Ser Lys Asp Pro Glu 85 90 His Glu Gly Cys Tyr Leu Ser Val Gly His Ser Gln Pro Leu Glu Asp 105 Cys Ser Phe Asn Met Thr Ala Lys Thr Phe Phe Ile Ile His Gly Trp 120 Thr Met Ser Gly 11e Phe Glu Asn Trp Leu His Lys Leu Val Ser Ala 130 135 140 Leu His Thr Arg Glu Lys Asp Ala Asn Val Val Val Asp Trp Leu

145					150					155					160
Pro	Leu	Ala	His	Gln	Leu	Tyr	Thr	Asp	Ala	Val	Asn	Asn	Thr	Arg	Val
				165					170					175	
Val	Gly	His	Ser	Ile	Ala	Arg	Met	Leu	Asp	Trp	Leu	Gln	Glu	Lys	Asp
			180					185					190		
Asp	Phe	Ser	Leu	Gly	Asn	Val	His	Leu	lle	Gly	Tyr	Ser	Leu	Gly	Ala
		195					200					205			
His	Val	Ala	Gly	Tyr	Ala	Gly	Asn	Phe	Val	Lys	Gly	Thr	Val	Gly	Arg
	210					215					220				
He	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Met	Phe	Glu	Gly	Ala	Asp	He
225					230					235					240
His	Lys	Arg	Leu	Ser	Pro	Asp	Asp	Ala	Asp	Phe	Val	Asp	Val	Leu	His
				245					250					255	
Thr	Tyr	Thr	Arg	Ser	Phe	Gly	Leu	Ser	He	G1 y	He	Gln	Met	Pro	Val
			260					265					270		
Gly	His	lle	Asp	He	Tyr	Pro	Asn	Gly	Gly	Asp	Phe	Gln	Pro	Gly	Cys
		275					280					285			
Gly	Leu	Asn	Asp	Val	Leu	Gly	Ser	He	Ala	Tyr	Gly	Thr	lle	Thr	Glu
	290					295					300				
Val	Val	Lys	Cys	Glu	His	G]u	Arg	Ala	Val	His	Leu	Phe	Val	Asp	Ser
305					310					315					320
Leu	Val	Asn	Gln	Asp	Lys	Pro	Ser	Phe	Ala	Phe	Gln	Cys	Thr	Asp	Ser
				325					330					335	
Asn	Arg	Phe	Lys	Lys	G1y	He	Cys		Ser	Cys	Arg	Lys		Arg	Cys
			340					345					350		
Asn	Ser		Gly	Tyr	Asn	Ala		Lys	Met	Arg	Asn		Arg	Asn	Ser
		355					360					365			
Lys		Tyr	Leu	Lys	Thr	_	Ala	Gly	Met	Pro		Arg	Gly	Asn	Leu
	370	_		_		375					380				
	Ser	Leu	Glu	Cys											
385					390										

<210> 3228 <211> 107

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<212> PRT
<213> Homo sapiens
<400> 3228
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Val Asn Tyr Asp Lys Pro Lys Glu Ala Thr Gln Gly Lys Asp Glu Asn
                                  25
Pro Ala Gln Phe Met Ala Arg Leu Val Ala Thr Leu Arg Arg Phe Thr
         35
                              40
                                                  45
Ala Leu Asp Pro Glu Gly Pro Glu Gly Cys Leu Ile Leu Asn Met His
                          55
                                              60
Phe Ile Ile Gln Ser Ala Pro Asp Ile Arg Lys Lys Phe Gln Lys Leu
 65
                     70
                                          75
                                                               80
Asp Ser Ser Pro Gln Thr Pro Gln Gln Asp Leu 11e Asn Leu Ala Phe
                                      90
                                                          95
                 85
Lys Val Phe Asn Asn Arg Glu Glu Thr Ala Lys
            100
                                 105
<210> 3229
<211> 277
<212> PRT
<213> Homo sapiens
<400> 3229
Met Ser Arg Glu Phe Arg Gly His Arg Asn Cys Val Leu Thr Leu Ala
                                      10
Tyr Ser Ala Pro Trp Asp Leu Pro Ser Thr Pro Cys Ala Glu Glu Ala
                                                      30
             20
                                  25
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Ala Ala Gly Gly Leu Leu Val Thr Gly Ser Thr Asp Gly Thr Ala Lys

Val Trp Gln Val Ala Ser Gly Cys Cys His Gln Thr Leu Arg Gly His

Thr Gly Ala Val Leu Cys Leu Val Leu Asp Thr Pro Gly His Thr Ala

75

55

70

50

Phe Thr Gly Ser Thr Asp Ala Thr Ile Arg Ala Trp Asp Ile Leu Ser Gly Glu Gln Leu Arg Val Phe Arg Glu His Arg Gly Ser Val Ile Cys Leu Glu Cys Ser Arg Ala Ala Gly Thr Leu Ala Pro Gly Pro Ser Thr Arg Ser Leu Glu Ser Cys Gly Gly Cys Ser Gly Ala Thr His Ser Ser Ser Thr Ala Ser Arg Cys Thr Ala Arg Cys Ser Thr Pro Pro Arg Thr Thr Ala Pro Cys Ala Ser Gly Thr Cys Ala Gly Ser Glu Val Pro Arg Gly Pro Leu Arg Pro Arg Ala Ala Ser Arg Gly Ser Ser Ala Thr Arg Trp Ala Ala Pro Pro Arg Pro Cys Ser Arg Pro Asp Pro Ala Gly Pro Leu Gln Thr Pro Ala Gln Thr Pro Ser Gly Ser Gln Ser Ala Pro Pro Cys Tyr Pro Arg Trp Trp Arg Pro Met Ala Gly Glu Gly Arg Gly Ala Arg Lys Pro Gly Arg Glu Glu Ser Pro Ser Gln Ala Ser Gly Phe Ser Leu Val Ala Arg Arg Arg Trp Glu Arg Glu Cys Ser Pro Trp Gly Pro Pro Pro Phe Pro Phe

<210> 3230

<211> 586

<212> PRT

<213> Homo sapiens

<400> 3230

Met Lys Tyr Ile Leu Val Thr Gly Gly Val Ile Ser Gly 11e Gly Lys

l				5					10					15	
Gly	Ile	He	Ala	Ser	Ser	He	G1 y	Thr	Ile	Leu	Lys	Ser	Cys	Gly	Leu
			20					25					30		
Arg	Val	Thr	Ala	He	Lys	lle	Asp	Pro	Tyr	He	Asn	He	Asp	Ala	Gly
		35					40					45			
Thr	Phe	Ser	Pro	Tyr	Glu	His	Gly	Glu	Val	Phe	Val	Leu	Asn	Asp	Gly
	50					55					60				
Gly	Glu	Val	Asp	Leu	Asp	Leu	Gly	Asn	Tyr	Glu	Arg	Phe	Leu	Asp	Пe
65					70					75					80
Asn	Leu	Tyr	Lys	Asp	Asn	Asn	Пе	Thr	Thr	Gly	Lys	He	Tyr	Gln	His
				85					90					95	
Val	He	Asn	Lys	Glu	Arg	Arg	Gly	Asp	Tyr	Leu	Gly	Lys	Thr	Val	Gln
			100					105					110		
Val	Val	Pro	His	He	Thr	Asp	Ala	Val	Gln	Glu	Trp	Val	Met	Asn	Gln
		115					120					125			
Ala		Val	Pro	Val	Asp		Asn	Lys	Glu	Glu	Pro	Gln	He	Cys	Val
	130					135					140				
	Glu	Leu	Gly	Gly	Thr	He	Gly	Asp	He		Gly	Met	Pro	Phe	
145					150					155					160
Glu	Ala	Phe	Arg		Phe	Gln	Phe	Lys		Lys	Arg	Glu	Asn		Cys
_				165			n	0.1	170	~		m.		175	
Asn	He	H1\$		Ser	Leu	Val	Pro		Leu	Ser	Ala	Thr		Glu	GIn
	TI		180	สา	C.I.		C	185		4.7			190	,	61
Lys	Ihr		Pro	Ihr	Gln	Asn		val	Arg	Ala	Leu		Gly	Leu	61 y
Lau	Con	195	Aon	Lou	11.	Va 1	200 Cua	Ana	Com	Com	Tha	205	11.	C1	Mat
Leu	210	110	изр	Leu	He		Cys		Sei	261	220	110	116	Glu	met
Ala		lve	Glu	Lve	He				Cve	Hic		Asn	Pro	Glu	Gln
225	, 41	Lys	010	Lys	230	501	mc t	1110	Cy 3	235	, (1)	поп	110	Olu	240
	He	Cvs	He	His	Asp	Val	Ser	Ser	Thr		Arø	Val	Pro	Val	
	110	0,0		245	ПОР	, 41	50.	50.	250		8			255	Lea
Leu	Glu	Glu	Gln		He	Va]	Lvs	Tyr		Lvs	Glu	Arg	Leu		Leu
			260				-	265				3	270	-	
Pro	He	Gly		Ser	Ala	Ser	Asn		Leu	Phe	Lys	Trp		Asn	Met
		275					280					285			
A12	Acn	Ara	Tur	C111	Ara	Lou	Cln	Lvc	110	Cvc	Sor	116	A10	Lou	Vol

	290					295					300				
Gly	Lys	Tyr	Thr	Lys	Leu	Arg	Asp	Cys	Tyr	Ala	Ser	Val	Phe	Lys	Ala
305					310					315					320
Leu	Glu	His	Ser	Ala	Leu	Ala	Пе	Asn	His	Lys	Leu	Asn	Leu	Met	Tyr
				325					330					335	
lle	Asp	Ser	He	Asp	Leu	Glu	Lys	He	Thr	Glu	Thr	Glu	Asp	Pro	Val
			340					345					350		
Lys	Phe	His	Glu	Ala	Trp	Gln	Lys	Leu	Cys	Lys	Ala	Asp	Gly	He	Leu
		355					360					365			
Val	Pro	Gly	Gly	Phe	Gly	Ile	Arg	Gly	Thr	Leu	Gly	Lys	Leu	Gln	Ala
	370					375					380				
He	Ser	Trp	Ala	Arg	Thr	Lys	Lys	lle	Pro	Phe	Leu	Gly	Val	Cys	Leu
385					390					395					400
Gly	Met	Gln	Leu	Ala	Val	11e	Glu	Phe	Ala	Arg	Asn	Cys	Leu	Asn	Leu
				405					410					415	
Lys	Asp	Ala	Asp	Ser	Thr	Glu	Phe	Arg	Pro	Asn	Ala	Pro	Val	Pro	Leu
			420					425					430		
Val	Ile	Asp	Met	Pro	Glu	His	Asn	Pro	Gly	Asn	Leu	Gly	Gly	Thr	Met
		435					440					445			
Arg	Leu	Gly	lle	Arg	Arg	Thr	Val	Phe	Lys	Thr	Glu	Asn	Ser	lle	Leu
	450					455					460				
Arg	Lys	Leu	Tyr	Gly	Asp	Val	Pro	Phe	Ile	Glu	Glu	Arg	His	Arg	His
465					470					475					480
Arg	Phe	Glu	Val	Asn	Pro	Asn	Leu	He	Lys	Gln	Phe	Glu	Gln	Asn	Asp
				485					490					495	
Leu	Ser	Phe	Val	Gly	Gln	Asp	Val	Asp	Gly	Asp	Arg	Met	Glu	He	He
			500					505					510		
Glu	Leu		Asn	His	Pro	Tyr	Phe	Val	G1 y	Val	Gln		His	Pro	G1u
		515					520					525			
Phe		Ser	Arg	Pro	Met	Lys	Pro	Ser	Pro	Pro	Tyr	Leu	Gly	Leu	Leu
	530					535					540				
Leu	Ala	Ala	Thr	Gly	Asn	Leu	Asn	Ala	Tyr		Gln	Gln	Gly	Cys	Lys
545					550					555					560
Leu	Ser	Ser	Ser	Λsp	Arg	Tyr	Ser	Asp	Ala	Ser	Asp	Asp	Ser	Phe	Ser
				565					570					575	
Glu	Pro	Arg	He	Ala	Glu	Leu	Glu	He	Ser						

580 585

<210> 3231

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3231

Met Asn lle Ile Thr Ser Pro Leu Pro Gly Ser Pro Asn Ser Leu Arg

1 5 10 15

Gly Ser Thr Phe Met Leu Gly Ser Ser Leu Glu Ala Ser Leu Gly Lys 20 25 30

Leu Gln Ser Gln Pro Ser Thr Ser Thr Cys Ser Pro Ser Pro Val Lys
35 40 45

Val Asn Lys Val Arg Val Ser Leu Glu Ala Arg Arg Leu Arg Val Gly
50 55 60

Val Glu Arg Ser His Ser Gln Ser Cys Leu Val Tyr Leu Ser Val Met
65 70 75 80

Lys Lys Arg Glu Glu Thr Asn Lys Met Glu Arg Val Glu Ala Arg Pro\$85\$ 90 95

Ser Thr Cys Phe Leu Gly Glu Leu Gly His Ser Gly Gln His Arg Arg 100 105 110

Val Pro Gly Leu Lys Lys Ile Asp His Gln Gln Gly Gln Gly Val Val
115 120 125

Thr Glu Lys Gly Ala Thr Pro Trp Val Asn Lys Gln
130 135 140

<210> 3232

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3232

Met Phe Phe Ile Phe Gln Lys Glu Lys Ala Leu Lys Ile Phe Leu Lys

5 10 15 Cys Asp Cys His Leu Phe Ser Thr Lys Asn Phe Leu Arg Phe Phe Lys 25 Arg Lys 11e Glu 11e Leu Ser Leu Pro Arg Phe Pro Ser Pro Pro Val 35 40 45 Phe Lys Met Lys Ala Gln Val Gln Glu Trp Gly Ala Gln Val Pro Gly 55 60 Val Tyr Thr Pro Pro Thr Gln Leu Arg Pro Ala Leu Ala Glu Gly Asp 65 70 75 80 Ala Val Leu Ser Ser Gln Pro Arg Glu Ala Ser Phe Ser Thr Ser Asn 85 90 Pro Thr Ala Met Asn Val Asn Ser Leu Gly Cys Phe Gln Lys Gln Glu 105 110 Ser Ala

<210> 3233

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3233

Met Glu Ile His His Phe Leu Leu Lys Lys Arg Lys Gln Ala Asn Leu

1 5 10 15

Ala Gln Leu Leu Arg Asp Ser Gln Asp Arg Asn Lys His Leu Gly Glu 20 25 30

Glu 11e Lys Glu Leu Gln Gln Arg Leu Gly Glu Val Gln Gly Asp Asn 35 40 45

Lys Leu Leu Arg Met Thr Ile Ala Lys Gln Arg Leu Gly Asp Glu Ala 50 55 60

11e Gly Val Arg His Phe Ala Ala His Glu Arg Glu Asp Leu Val Gln65707580

Gln Leu Glu Arg Ala Lys Glu Gln 11e Glu Ser Leu Glu His Asp Leu 85 90 95

Gln Ala Ser Val Asp Glu Leu Gln Asp Val Lys Glu Glu Arg Ser Ser

			100					105					110		
Tyr	Gln	Asp	Lys	Val	Glu	Arg	Leu	Asn	Gln	Glu	Leu	Asn	His	lle	Leu
		115					120					125			
Ser	Gly	His	Glu	Asn	Arg	He	He	Asp	Val	Asp	Ala	Leu	Cys	Met	Glu
	130					135					140				
Asn	Arg	Tyr	Leu	G1n	Glu	Arg	Leu	Lys	Gln	Leu	His	Glu	Glu	Val	Asn
145					150					155					160
Leu	Leu	Lys	Ser	Asn	He	Ala	Lys	Tyr	Lys	Asn	Ala	Leu	Glu	Arg	Arg
				165					170					175	
Lys	Asn	Ser	Lys	Gly	Gln	Gly	Lys	Ser	Ser	Ser	Ser	Ala	Leu	Thr	Gly
			180					185					190		
Val	Leu	Ser	Ala	Lys	Gln	Val	Gln	Asp	Leu	Leu	Ser	Glu	Asp	His	Gly
		195					200					205			
Cys	Ser	Leu	Pro	Ala	Thr	Pro	Gln	Ser	He	Ser	Asp	Leu	Lys	Ser	Leu
	210					215					220				
Ala	Thr	Ala	Leu	Leu	Glu	Thr	He	His	Glu	Lys	Asn	Met	Val	He	Gln
225					230					235					240
His	Gln	Arg	Gln	Thr	Asn	Lys	He	Leu	Gly	Asn	Arg	Val	Ala	Glu	Leu
				245					250					255	
Glu	Lys	Lys	Leu	Arg	Thr	Leu	Glu	Val	Ser	Gly	Leu	Trp	Ser	Leu	Pro
			260					265					270		
Gly	Gly	Lys	Asp	Thr	He	Leu	Phe	Ser	Asp	Pro	Thr	Leu	Pro	Ser	Gly
		275					280					285			
Gln	Arg	Ser	Arg	Ser	Pro	Leu	Leu	Lys	Phe	Val	Glu	Gln	Pro	Thr	Glu
	290					295					300				
Asn	Lys	Ala	Asp	Pro	Lys	Asp	Gly	Glu	Ala	Gln	Lys	Gln	Glu	Glu	Asp
305															320
Glu	Ser	Cys	Ala		Ala	Glu	Ala	Leu	Thr	Ala	Pro	Glu	Asp		Gly
				325					330					335	
Arg	Pro	Ala		Asn	Ser	Pro	Ala		G] n	Ser	Arg	Gly	Asn	Gln	Cys
			340					345					350		
Lys	Leu		His	Pro	Ser	Leu		Gln	Leu	Pro	Ser		Glu	Glu	Val
	_	355					360			an.		365			
Asn		Leu	G1 y	Arg	Glu		He	Lys	Leu	Thr		Glu	Gln	Ala	Ala
	370					375					380	0.3	0.3	0.7	
Ala	6.111	l eu	Glo	Glu	Val	Ara	Ara	(11)	Sor	Pro	He	Glin	G1v	Giln	Aro

Ser Glu Thr Gly Pro Ala Pro Pro Gly Leu Ala Ile Gln Gly Glu Leu Pro Lys Ser His Leu Asp Ser Phe Glu Ala Ser Arg Pro Ala Ala Lys Ala Ser Thr Pro Glu Asp Gly Lys Gly Ile Pro Glu Gly Gly Met Arg Ser Thr Val Lys Thr <210> 3234 <211> 278 <212> PRT <213> Homo sapiens <400> 3234 Met Thr Asp Leu Asn Lys His Ile Lys Gln Ala Gln Thr Gln Arg Lys Gln Leu Leu Glu Glu Ser Arg Glu Leu His Arg Glu Lys Leu Leu Val Gln Ala Glu Asn Arg Phe Phe Leu Glu Tyr Leu Thr Asn Lys Thr Glu Glu Tyr Thr Glu Gln Pro Glu Lys Val Trp Asn Ser Tyr Leu Gln Lys Ser Gly Glu Ile Glu Arg Arg Gln Glu Ser Ala Ser Arg Tyr Ala Glu Gln Ile Ser Val Leu Lys Thr Ala Leu Leu Gln Lys Glu Asn Ile Gln Ser Ser Leu Lys Arg Lys Leu Gln Ala Met Arg Asp Ile Ala Ile Leu Lys Glu Lys Glu Glu Lys Glu Ile Gln Thr Leu Gln Glu Glu Thr

Lys Lys Val Gln Ala Glu Thr Ala Ser Lys Thr Arg Glu Val Gln Ala

135 140 130 Gln Leu Leu Gln Glu Lys Arg Leu Leu Glu Lys Gln Leu Ser Glu Pro 150 155 160 Asp Arg Arg Leu Leu Gly Lys Arg Lys Arg Glu Leu Asn Met Lys 170 165 Ala Gln Ala Leu Lys Leu Ala Ala Lys Arg Phe Ile Phe Glu Tyr Ser 185 Cys Gly Ile Asn Arg Glu Asn Gln Gln Phe Lys Lys Glu Leu Leu Gln 195 200 205 Leu Ile Glu Gln Ala Gln Lys Leu Thr Ala Thr Gln Ser His Leu Glu 215 220 Asn Arg Lys Gln Gln Leu Gln Gln Glu Gln Trp Tyr Leu Glu Ser Leu 230 235 Ile Gln Ala Arg Gln Arg Leu Gln Gly Ser His Asn Gln Cys Leu Asn 250 245 Arg Gln Asp Val Pro Lys Thr Thr Pro Ser Leu Pro Gln Gly Thr Lys 260 265 270 Ser Arg Ile Asn Pro Lys 275 <210> 3235 <211> 112 <212> PRT <213> Homo sapiens <400> 3235 Met Arg His Arg Ala Gln Gln Thr Gln Lys Phe Lys Ala Ala Tyr Ala

1 5 10 15

Tyr Asn Leu Met Gly Ser Leu Ser His Glu Phe Arg Tyr Ser Phe Val
20 25 30

Arg Val Leu Trp Phe Arg 11e Ser His Lys Ala Val 11e Lys Leu Leu
35 40 45

Ala Arg Thr Gly Val Ser Ser Glu Val Gln Met Glu Glu Asp Ser Leu
50 55 60

Leu Gln Arg Thr Asp Gly Gly Thr Gln Phe Leu Glu Val Gly Gln Thr

Ala Ala Ala Leu Cys Ser Leu Pro Cys Gly Pro Leu Arg Tyr Asp His Leu Leu Cys Glu Ser Val Gln Ser Ser Arg Ala Thr Glu Arg Ala Cys <210> 3236 <211> 655 <212> PRT <213> Homo sapiens <400> 3236 Met Pro Leu Lys Trp Lys Thr Ser Ser Pro Ala Ile Trp Arg Phe Pro Val Pro Val Pro Lys Thr Ser Arg Ser Thr Pro Leu Ser Pro Ala Tyr Ile Ser Leu Val Glu Glu Glu Asp Gln His Met Lys Leu Ser Leu Gly Gly Ser Glu Met Gly Leu Ser Ser His Leu Gln Ser Ser Lys Ala Gly Pro Thr Arg Ile Phe Thr Ser Asn Thr His Ser Ser Val Val Leu Gln Gly Phe Asp Gln Leu Arg Leu Glu Gly Leu Leu Cys Asp Val Thr Leu Met Pro Gly Asp Thr Asp Asp Ala Phe Pro Val His Arg Val Met Met Ala Ser Ala Ser Asp Tyr Phe Lys Ala Met Phe Thr Gly Gly Met Lys Glu Gln Asp Leu Met Cys lle Lys Leu His Gly Val Ser Lys Val Gly Leu Arg Lys Ile Ile Asp Phe Ile Tyr Thr Ala Lys Leu Ser Leu Asn Met Asp Asn Leu Gln Asp Thr Leu Glu Ala Ala Ser Phe Leu Gln 11e

Leu Pro Val Leu Asp Phe Cys Lys Val Phe Leu Ile Ser Gly Val Thr

		180					185					190		
sp A	sn	Cys	Val	Glu	Val	Gly	Arg	lle	Ala	Asn	Thr	Tyr	Asn	Leu
1	95					200					205			
lu V	al	Asp	Lys	Tyr	Val	Asn	Ser	Phe	Val	Leu	Lys	Asn	Phe	Pro
10					215					220				
eu L	eu	Ser	Thr	Gly	Glu	Phe	Leu	Lys	Leu	Pro	Phe	G] u	Arg	Leu
				230					235					240
ne V	al	Leu	Ser	Ser	Asn	Ser	Leu	Lys	His	Cys	Thr	Glu	Leu	Glu
			245					250					255	
ne L	ys	Ala	Thr	Cys	Arg	Trp	Leu	Arg	Leu	Glu	Glu	Pro	Arg	Met
		260					265					270		
ne A	la	Ala	Lys	Leu	Met	Lys	Asn	He	Arg	Phe	Pro	Leu	Met	Thr
2	75					280					285			
ln G	lu	Leu	lle	Asn	Tyr	Val	Gln	Thr	Val	Asp	Phe	Met	Arg	Thr
90					295					300				
sn T	hr	Cys	Val	Asn	Leu	Leu	Leu	Glu	Ala	Ser	Asn	Tyr	Gln	Met
				310					315					320
ro T	yr	Met		Pro	Val	Met	Gln		Asp	Arg	Thr	Ala		Arg
			325											
sp T			His	Leu	Val	Thr		Gly	G1y	Val	Leu		Gln	Arg
							345							
		Ser	Lys	Glu	Leu		Met	Tyr	Asp	Glu		Ala	His	Glu
	er	Leu	Ala	Pro		Asp	Ala	Pro	Arg		Gln	His	Gly	lle
70						_						_		_
al I	le	Gly	Asn		Leu	Tyr	Val	Val	-	Gly	Gln	Ser	Asn	
		63						m		DI		121		400
nr L	ys	GIŅ		lhr	Ala	Val	Asp		Val	Phe	Arg	Phe		Pro
					C1	17 1	A 1				C I	,		T)
yr A			irp	Met	GIn	Val		Ser	Leu	Asn	Glu		Arg	Ihr
			C	4.3				т		$\boldsymbol{\tau}$	A 1		C1	C1
		Leu	Ser	Ala	Leu		GIY	lyr	Leu	ıyr		val	СТУ	GIY
		A 1 -	C1	C1	1		ть	V- 1	C1	C		Λ	D	Λ
sn A	13	ита	01λ	ogu	Leu	rro	ınr	v a i	oru	Cys	ryr	ASII	1.1.0	arg
50					455					460				
s r s a y 7 a	n T o T p T l V 3 s S 0 l I r L r A	n Thr to Tyr p Thr l Val 355 s Ser 0 l He r Lys r Asn e His 435	n Thr Cys to Tyr Met Thr 340 1 Val Ser 355 s Ser Leu 0 1 He Gly r Lys Gly r Lys Gly r Asn Lys 420 e His Leu 435	n Thr Cys Val o Tyr Met Gln	n Thr Cys Val Asn 310 o Tyr Met Gln Pro 325 p Thr Thr His Leu 340 1 Val Ser Lys Glu 355 s Ser Leu Ala Pro 0 1 Ile Gly Asn Phe 390 r Lys Gly Lys Thr 405 r Asn Lys Trp Met 420 e His Leu Ser Ala 435	n Thr Cys Val Asn Leu 310 o Tyr Met Gln Pro Val 325 p Thr Thr His Leu Val 340 1 Val Ser Lys Glu Leu 355 s Ser Leu Ala Pro Met 0	n Thr Cys Val Asn Leu Leu 310 310 Met 310 Met 50 Tyr Met Gln Pro Val Met 325 Jan Jan Met Arg Arg 360 Arg 360 Arg 360 Arg 360 Arg 360 Arg Arg Arg 360 Arg Arg 360 Arg Arg<	n Thr Cys Val Asn Leu Leu Leu 310 310 Wal Met Gln Pro Val Met Gln 325 325 345 345 345 345 345 345 345 345 345 360 86 <td>n Thr Cys Val Asn Leu Leu Leu Glu o Tyr Met Gln Pro Val Met Gln Ser 325 330 p Thr Thr His Leu Val Thr Leu Gly 340 345 345 345 345 1 Tyr Met Tyr Val Pro Met Asp Ala Pro Met Asp Ala Pro Met Asp Ala Pro Met Ala Pro Met Ala Pro Met Ala Pro Wal Ala Pro Met Ala Pro Met Ala Pro Wal Ala Pro Met Ala Pro</td> <td>n Thr Cys Val Asn Leu Leu Leu Glu Ala 310 315 325 325 330 330 p Thr Thr His Leu Val Thr Leu Gly Gly p Thr Thr His Leu Val Thr Leu Gly Gly Gly Gly Asp Asp Asp Asp Arg Arg<td>n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser 310 315 330 330 330 330 330 330 330 330 315 330 330 330 315 330 330 315 330 330 330 330 330 330 330 330 330 330 330 330 340 345</td><td>n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn 310 310 315 315 315 315 315 316 317 318 318 318 318 318 318 318 318 318 318 318 318 318 318 318 330 318 318 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 3</td><td>n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala 2 Tyr Met Leu Val Thr Leu Gly Gly Val Leu Arg 340 Tyr Glu Leu Arg Met Tyr Asp Glu Leu Arg 355 Tyr Glu Leu Arg Met Tyr Asp Glu Lys Ala 355 Tyr Ala Pro Met Asp Ala Pro Arg His 360 Tyr Val Pro Arg Tyr Arg<td>In The Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr Gln 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Tyr His Leu Val Tyr Leu Gln Arg Gln Arg Gln Arg Gln Arg Ala His Arg Gln Arg Ala His Ala Ala His Ala Ala Ala Ala Arg Ala <</td></td></td>	n Thr Cys Val Asn Leu Leu Leu Glu o Tyr Met Gln Pro Val Met Gln Ser 325 330 p Thr Thr His Leu Val Thr Leu Gly 340 345 345 345 345 1 Tyr Met Tyr Val Pro Met Asp Ala Pro Met Asp Ala Pro Met Asp Ala Pro Met Ala Pro Met Ala Pro Met Ala Pro Wal Ala Pro Met Ala Pro Met Ala Pro Wal Ala Pro Met Ala Pro	n Thr Cys Val Asn Leu Leu Leu Glu Ala 310 315 325 325 330 330 p Thr Thr His Leu Val Thr Leu Gly Gly p Thr Thr His Leu Val Thr Leu Gly Gly Gly Gly Asp Asp Asp Asp Arg Arg <td>n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser 310 315 330 330 330 330 330 330 330 330 315 330 330 330 315 330 330 315 330 330 330 330 330 330 330 330 330 330 330 330 340 345</td> <td>n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn 310 310 315 315 315 315 315 316 317 318 318 318 318 318 318 318 318 318 318 318 318 318 318 318 330 318 318 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 3</td> <td>n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala 2 Tyr Met Leu Val Thr Leu Gly Gly Val Leu Arg 340 Tyr Glu Leu Arg Met Tyr Asp Glu Leu Arg 355 Tyr Glu Leu Arg Met Tyr Asp Glu Lys Ala 355 Tyr Ala Pro Met Asp Ala Pro Arg His 360 Tyr Val Pro Arg Tyr Arg<td>In The Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr Gln 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Tyr His Leu Val Tyr Leu Gln Arg Gln Arg Gln Arg Gln Arg Ala His Arg Gln Arg Ala His Ala Ala His Ala Ala Ala Ala Arg Ala <</td></td>	n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser 310 315 330 330 330 330 330 330 330 330 315 330 330 330 315 330 330 315 330 330 330 330 330 330 330 330 330 330 330 330 340 345	n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn 310 310 315 315 315 315 315 316 317 318 318 318 318 318 318 318 318 318 318 318 318 318 318 318 330 318 318 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 330 3	n Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala 2 Tyr Met Leu Val Thr Leu Gly Gly Val Leu Arg 340 Tyr Glu Leu Arg Met Tyr Asp Glu Leu Arg 355 Tyr Glu Leu Arg Met Tyr Asp Glu Lys Ala 355 Tyr Ala Pro Met Asp Ala Pro Arg His 360 Tyr Val Pro Arg Tyr Arg <td>In The Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr Gln 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Tyr His Leu Val Tyr Leu Gln Arg Gln Arg Gln Arg Gln Arg Ala His Arg Gln Arg Ala His Ala Ala His Ala Ala Ala Ala Arg Ala <</td>	In The Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr Gln 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile 10 Tyr Tyr His Leu Val Tyr Leu Gln Arg Gln Arg Gln Arg Gln Arg Ala His Arg Gln Arg Ala His Ala Ala His Ala Ala Ala Ala Arg Ala <

His Ala Gly Thr Val Tyr Gly Gly Val Met Tyr Ile Ser Gly Gly Ile Thr His Asp Thr Phe Gln Lys Glu Leu Met Cys Phe Asp Pro Asp Thr Asp Lys Trp Ile Gln Lys Ala Pro Met Thr Thr Val Arg Gly Leu His Cys Met Cys Thr Val Gly Glu Arg Leu Tyr Val 11e Gly Gly Asn His Phe Arg Gly Thr Ser Asp Tyr Asp Asp Val Leu Ser Cys Glu Tyr Tyr Ser Pro 11e Leu Asp Gln Trp Thr Pro 11e Ala Ala Met Leu Arg Gly Gln Ser Asp Val Gly Val Ala Val Phe Glu Asn Lys Ile Tyr Val Val Gly Gly Tyr Ser Trp Asn Asn Arg Cys Met Val Glu Ile Val Gln Lys Tyr Asp Pro Asp Lys Asp Glu Trp His Lys Val Phe Asp Leu Pro Glu Ser Leu Gly Gly Ile Arg Ala Cys Thr Leu Thr Val Phe Pro Pro Glu Glu Thr Thr Pro Ser Pro Ser Arg Glu Ser Pro Leu Ser Ala Pro

<210> 3237

<211> 608

<212> PRT

<213> Homo sapiens

<400> 3237

Met Leu Leu Glu Thr Gly Met Lys Glu Glu Gly Leu Phe Arg 11e

Gly Ala Gly Ala Ser Lys Leu Lys Lys Leu Lys Ala Ala Leu Asp Cys $20 \hspace{1cm} 25 \hspace{1cm} 30$

Ser	Thr	Ser	His	Leu	Asp	Glu	Phe	Tyr	Ser	Asp	Pro	His	Ala	Val	Ala
		35					40					45			
Gly	Ala	Leu	Lys	Ser	Tyr	Leu	Arg	Glu	Leu	Pro	Glu	Pro	Leu	Met	Thr
	50					55					60				
Phe	Asn	Leu	Tyr	Glu	Glu	Trp	Thr	Gln	Val	Ala	Ser	Val	Gln	Asp	Gln
65					70					75					80
Asp	Lys	Lys	Leu	Gln	Asp	Leu	Trp	Arg	Thr	Cys	Gln	Lys	Leu	Pro	Pro
				85					90					95	
Gln	Asn	Phe	Val	Asn	Phe	Arg	Tyr	Leu	Ile	Lys	Phe	Leu	Ala	Lys	Leu
			100					105					110		
Ala	Gln	Thr	Ser	Asp	Val	Asn	Lys	Met	Thr	Pro	Ser	Asn	Ile	Ala	He
		115					120					125			
Val	Leu	Gly	Pro	Asn	Leu	Leu	Trp	Ala	Arg	Asn	Glu	Gly	Thr	Leu	Ala
	130					135					140				
Glu	Met	Ala	Ala	Ala	Thr	Ser	Val	His	Val	Val	Ala	Val	Пе	Glu	Pro
145					150					155					160
He	He	Gln	His	Ala	Asp	Trp	Phe	Phe	Pro	Glu	Glu	Val	Glu	Phe	Asn
				165					170					175	
Val	Ser	Glu	Ala	Phe	Val	Pro	Leu	Thr	Thr	Pro	Ser	Ser	Asn	His	Ser
			180					185					190		
Phe	His	Thr	Gly	Asn	Asp	Ser	Asp	Ser	Gly	Thr	Leu	Glu	Arg	Lys	Arg
		195					200					205			
Pro	Ala	Ser	Met	Ala	Val	Met	Glu	Gly	Asp	Leu	Val	Lys	Lys	Glu	Ser
	210					215					220				
Phe	Gly	Val	Lys	Leu	Met	Asp	Phe	Gln	Ala	His	Arg	Arg	Gly	Gly	Thr
225					230					235					240
Leu	Asn	Arg	Lys	His	He	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Leu	Pro	Pro
				245					250					255	
Thr	Asp	G]y	Ser	Thr	Val	Val	Pro	Ala	Gl y	Pro	Glu	Pro	Pro	Pro	Gln
			260					265					270		
Ser	Ser	Arg	Ala	Glu	Ser	Ser	Ser	Gly	Gly	Gly	Thr		Pro	Ser	Ser
		275					280					285			
Ala		He	Leu	Glu	Gln	Gly	Pro	Ser	Pro	Gly		G1 y	Cys	Pro	Pro
	290					295				_	300				
	Pro	Lys	Asp	Pro		Ser	Ala	Ala	Val		Ala	Pro	G1 y	Arg	
305					310					315					320

Asn	Ser	Gln	Ile		Ser	Gly	G1n	Asn		Pro	Gln	Ala	Ala		Gly
0		0.1		325	14 .	C1	C1	D	330			4.7	0.1	335	C
Ser	HIS	GIN		ser	Met	GIY	GIN	Pro	HIS	Asn	Ala	Ala		Pro	Ser
D		T)	340			A 7	v i	345		15	A 1	D	350	D	D
Pro	HIS		Leu	Arg	Arg	Ala		Lys	Lys	Pro	Ala		Ala	Pro	Pro
	Б	355		Б	Б	Б	360		Б	0.1	0.1	365			0
Lys		Gly	Asn	Pro	Pro		Gly	His	Pro	Gly		GIn	Ser	Ser	Ser
	370					375					380			mı.	
	Thr	Ser	GIn	His		Pro	Ser	Leu	Ser		Lys	Pro	Pro	Thr	
385	_		_	_	390					395	_	_			400
Ser	Pro	Ser	Pro		Thr	Gln	His	Thr		Gln	Pro	Pro	Gly		Pro
				405					410					415	
Ser	Ala	Pro	Ser	Gln	Leu	Ser	Ala	Pro	Arg	Arg	Tyr	Ser	Ser	Ser	Leu
			420					425					430		
Ser	Pro	He	Gln	Ala	Pro	Asn	His	Pro	Pro	Pro	Gln	Pro	Pro	Thr	Gln
		435				•	440					445			
Ala	Thr	Pro	Leu	Met	His	Thr	Lys	Pro	Asn	Ser	Gln	Gly	Pro	Pro	Asn
	450					455					460				
Pro	Met	Ala	Leu	Pro	Ser	Glu	His	Gly	Leu	Glu	Gln	Pro	Ser	His	Thr
465					470					475					480
Pro	Pro	Gln	Thr	Pro	Thr	Pro	Pro	Ser	Thr	Pro	Pro	Leu	Gly	Lys	Gln
				485					490					495	
Asn	Pro	Ser	Leu	Pro	Ala	Pro	Gln	Thr	Leu	Ala	Gly	Gly	Asn	Pro	Glu
			500					505					510		
Thr	Ala	Gln	Pro	His	Ala	Gly	Thr	Leu	Pro	Arg	Pro	Arg	Pro	Val	Pro
		515					520					525			
Lys	Pro	Arg	Asn	Arg	Pro	Ser	Val	Pro	Pro	Pro	Pro	Gln	Pro	Pro	Gly
	530					535					540				
Val	His	Ser	Ala	Gly	Asp	Ser	Ser	Leu	Thr	Asn	Thr	Ala	Pro	Thr	Ala
545					550					555					560
Ser	Lys	11e	Val	Thr	Asp	Ser	Asn	Ser	Arg	Val	Ser	Glu	Pro	His	Arg
				565					570					575	
Ser	lle	Phe	Pro	Glu	Met	His	Ser	Asp	Ser	Ala	Ser	Lys	Asp	Val	Pro
			580					585	•				590		
Gly	Arg	He	Leu	Leu	Asp	He	Asp	Asn	Asp	Thr	Glu	Ser	Thr	Ala	Leu
		595					600					605			

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<211> 510
<212> PRT
<213> Homo sapiens
<400> 3238
Met Val Ala Arg Val Gly Leu Leu Leu Arg Ala Leu Gln Leu Leu Leu
                                      10
Trp Gly His Leu Asp Ala Gln Pro Ala Glu Arg Gly Gly Gln Glu Leu
                                 25
Arg Lys Glu Ala Glu Ala Phe Leu Glu Lys Tyr Gly Tyr Leu Asn Glu
         35
                             40
                                                  45
Gln Val Pro Lys Ala Pro Thr Ser Thr Arg Phe Ser Asp Ala Ile Arg
                         55
                                              60
Ala Phe Gln Trp Val Ser Gln Leu Pro Val Ser Gly Val Leu Asp Arg
                     70
                                          75
Ala Thr Leu Arg Gln Met Thr Arg Pro Arg Cys Gly Val Thr Asp Thr
                 85
                                     90
Asn Ser Tyr Ala Ala Trp Ala Glu Arg Ile Ser Asp Leu Phe Ala Arg
                                 105
His Arg Thr Lys Met Arg Arg Lys Lys Arg Phe Ala Lys Gln Gly Asn
        115
                            120
                                                 125
Lys Trp Tyr Lys Gln His Leu Ser Tyr Arg Leu Val Asn Trp Pro Glu
                        135
His Leu Pro Glu Pro Ala Val Arg Gly Ala Val Arg Ala Ala Phe Gln
                    150
                                        155
Leu Trp Ser Asn Val Ser Ala Leu Glu Phe Trp Glu Ala Pro Ala Thr
                165
                                     170
                                                         175
Gly Pro Ala Asp Ile Arg Leu Thr Phe Phe Gln Gly Asp His Asn Asp
                                185
Gly Leu Gly Asn Ala Phe Asp Gly Pro Gly Gly Ala Leu Ala His Ala
        195
                            200
                                                 205
Phe Leu Pro Arg Arg Gly Glu Ala His Phe Asp Gln Asp Glu Arg Trp
```

<210> 3238

Ser	Leu	Ser	Arg	Arg	Arg	Gly	Arg	Asn	Leu	Phe	Val	Val	Leu	Ala	His
225					230					235					240
Glu	He	Gly	His	Thr	Leu	Gly	Leu	Thr	His	Ser	Pro	Ala	Pro	Arg	Ala
				245					250					255	
Leu	Met	Ala	Pro	Tyr	Tyr	Lys	Arg	Leu	Gly	Arg	Asp	Ala	Leu	Leu	Ser
			260					265					270		
Trp	Asp	Asp	Val	Leu	Ala	Val	Gln	Ser	Leu	Tyr	Gly	Lys	Pro	Leu	Gly
		275					280					285			
Gly	Ser	Val	Ala	Val	Gln	Leu	Pro	Gly	Lys	Leu	Phe	Thr	Asp	Phe	Glu
	290					295					300				
Thr	Trp	Asp	Ser	Tyr	Ser	Pro	Gln	Gly	Arg	Arg	Pro	Glu	Thr	Gln	Gly
305					310					315					320
Pro	Lys	Tyr	Cys	His	Ser	Ser	Phe	Asp	Ala	He	Thr	Val	Gly	Ser	His
				325					330					335	
Phe	Trp	Glu	Val	Ala	Ala	Asp	Gly	Asn	Val	Ser	Glu	Pro	Arg	Pro	Leu
			340					345					350		
Gln	Glu	Arg	Trp	Val	Gly	Leu	Pro	Pro	Asn	He	Glu	Ala	Ala	Ala	Val
		355					360					365			
Ser	Leu	Asn	Asp	Gly	Asp	Phe	Tyr	Phe	Phe	Lys	Gly	Gly	Arg	Cys	Trp
	370					375					380				
Arg	Phe	Arg	Gly	Pro	Lys	Pro	Val	Trp	Gly	Leu	Pro	Gln	Leu	Cys	Arg
385					390					395					400
Ala	Gly	Gly	Leu	Pro	Arg	His	Pro	Asp	Ala	Ala	Leu	Phe	Phe	Pro	Pro
				405					410					415	
Leu	Arg	Arg	Leu	He	Leu	Phe	Lys	G1 y	Ala	Arg	Tyr	Tyr	Val	Leu	Ala
		•	420					425					430		
Arg	Gly	Gly	Leu	Gln	Val	Glu	Pro	Tyr	Tyr	Pro	Arg	Ser	Leu	Gln	Asp
		435					440					445			
Trp	Gly	Gly	lle	Pro	Glu	Glu	Val	Ser	Gly	Ala	Leu	Pro	Arg	Pro	Asp
	450					455					460				
Gly	Ser	He	He	Phe	Phe	Arg	Asp	Asp	Arg	Tyr	Trp	Arg	Leu	Asp	Gln
465					470					475					480
Ala	Lys	Leu	Gln	Ala	Thr	Thr	Ser	Gly	Arg	Trp	Ala	Thr	Glu	Leu	Pro
				485					490					495	
Trp	Met	Gly	Cys	Trp	His	Ala	Asn	Ser	Gly	Ser	Ala	Leu	Phe		
			500					505					510		

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<211> 248
<212> PRT
<213> Homo sapiens
<400> 3239
Met Pro Arg Ile Ala Gly Asn His Leu Met Leu Glu Glu Ser Arg Thr
                  5
Cys Ser Ser Pro Glu Leu Leu Asp Gly Val Trp Pro Cys Gln Pro Leu
                                 25
His Phe Gly Leu Pro Ala Ser Glu Met His Phe Gln Thr Met Leu Lys
         35
                             40
                                                  45
Ser Lys Leu Asn Val Leu Thr Leu Lys Lys Glu Pro Leu Pro Ala Val
                                              60
                         55
Ile Phe His Glu Pro Glu Ala Ile Glu Leu Cys Thr Thr Thr Pro Leu
                     70
                                          75
Met Lys Thr Arg Thr His Ser Gly Cys Lys Val Thr Tyr Leu Gly Lys
                 85
                                      90
Val Ser Thr Thr Gly Met Gln Phe Leu Ser Gly Cys Thr Glu Lys Pro
                                105
Val Ile Glu Leu Trp Lys Lys His Thr Leu Ala Arg Glu Asp Val Phe
        115
                            120
                                                 125
Pro Ala Asn Ala Leu Leu Glu lle Arg Pro Phe Gln Val Trp Leu His
                        135
His Leu Asp His Lys Gly Glu Ala Thr Val His Met Asp Thr Phe Gln
                    150
                                         155
Val Ala Arg Ile Ala Tyr Cys Thr Ala Asp His Asn Val Ser Pro Asn
                                     170
                165
                                                         175
lle Phe Ala Trp Val Tyr Arg Glu lle Asn Asp Asp Leu Ser Tyr Gln
            180
                                185
Met Asp Cys His Ala Val Glu Cys Glu Ser Lys Leu Glu Ala Lys Lys
        195
                            200
                                                 205
Leu Ala His Ala Met Met Glu Ala Phe Arg Lys Thr Phe His Ser Met
```

<210> 3239

Lys Ser Asp Gly Arg Ile His Ser Asn Ser Ser Glu Glu Val Ser
225 230 235 240
Gln Glu Leu Glu Ser Asp Asp Gly
245

<210> 3240

<211> 588

<212> PRT

<213> Homo sapiens

<400> 3240

Met Asp Thr Asn Asp Asp Pro Asp Glu Asp His Leu Thr Ser Tyr Asp

1 5 10 15

11e Gln Leu Ser 11e Gln Glu Ser 11e Glu Ala Ser Lys Thr Ala Leu 20 25 30

Cys Pro Glu Arg Phe Val Pro Leu Ser Ala Gln Asn Arg Lys Leu Val 35 40 45

Glu Ala Ile Lys Gln Gly His Ile Leu Glu Leu Gln Glu Tyr Val Lys 50 55 60

Tyr Lys Tyr Ala Met Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu 65 70 75 80

His Glu Ala Val Val Gln Pro IIe Gln Gln IIe Leu Glu IIe Val Leu

85

90

95

Asp Ala Ser Tyr Lys Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu
100 105 110

Thr Pro Leu Thr Leu Ala Val Lys Ala Gly Leu Val Glu Asn Val Arg 115 120 125

Thr Leu Leu Glu Lys Gly Val Trp Pro Asn Thr Lys Asn Asp Lys Gly
130 135 140

Glu Thr Pro Leu Leu lle Ala Val Lys Lys Gly Ser Tyr Asp Met Val 145 150 155 160

Ser Thr Leu Ile Lys His Asn Thr Ser Leu Asp Gln Pro Cys Val Lys 165 170 175

Arg Trp Ser Ala Met His Glu Ala Ala Lys Gln Gly Arg Lys Asp lle 180 185 190

Val	Ala	Leu	Leu	Leu	Lys	His	Gly	Gly	Asn	Val	His	Leu	Arg	Asp	Gly
		195					200					205			
Phe	G1y	Val	Thr	Pro	Leu	Gly	Val	Ala	Ala	Glu	Tyr	Gly	His	Cys	Asp
	210					215					220				
Val	Leu	Glu	His	Leu	He	His	Lys	Gly	Gly	Asp	Val	Leu	Ala	Leu	Ala
225					230					235					240
Asp	Asp	Gly	Ala	Ser	Val	Leu	Phe	Glu	Ala	Ala	Gly	Gly	Gly	Asn	Pro
				245					250					255	
Asp	Cys	He	Ser	Leu	Leu	Leu	Glu	Tyr	Gly	Gly	Ser	Gly	Asn	Val	Pro
			260					265					270		
Asn	Arg	Ala	Gly	His	Leu	Pro	He	His	Arg	Ala	Ala	Tyr	Glu	Gly	His
		275					280					285			
Tyr	Leu	Ala	Leu	Lys	Tyr	Leu	He	Pro	Val	Thr	Ser	Lys	Asn	Ala	He
	290					295					300				
Arg	Lys	Ser	Gly	Leu	Thr	Pro	He	His	Ser	Ala	Ala	Asp	Gly	Gln	Asn
305					310					315					320
Ala	Gln	Cys	Leu	Glu	Leu	Leu	He	Glu	Asn	Gly	Phe	Asp	Val	Asn	Thr
				325					330					335	
Leu	Leu	Ala	Asp	His	He	Ser	Gln	Ser	Cys	Asp	Asp	Glu	Arg	Lys	Thr
			340					345					350		
Ala	Leu	Tyr	Phe	Ala	Val	Ser	Asn	Asn	Asp	Val	His	Cys	Thr	Glu	Val
		355					360					365			
Leu	Leu	Ala	Ala	Gly	Ala	Asp	Pro	Asn	Leu	Asp	Pro	Leu	Asn	Cys	Leu
	370					375					380				
Leu	Val	Ala	Val	Arg	Ala	Asn	Asn	Tyr	Glu	He	Val	Arg	Leu	Leu	Leu
385					390					395					400
Ser	His	Gly	Ala	Asn	Val	Asn	Cys	Tyr	Phe	Met	His	Val	Asn		Thr
				405					410					415	
Arg	Phe	Pro		Val	He	Gln	Tyr		Leu	Asn	Asp	Glu		Met	Leu
			420					425					430		
Arg	Leu		Leu	Asn	Asn	Gly		Gln	Val	Glu	Met		Phe	Asp	Cys
		435					440					445			
Met	His	G] y	Asp	11e	Phe		Asn	Ser	Phe	Va]		Ser	Glu	lle	Gln
	450					455					460				_
	Glu	Val	Leu	Pro		Trp	Thr	Ser	Cys		He	Lys	Asp	Asn	
465					470					475					480

Phe Cys Glu Phe Ile Thr Val Pro Trp Met Lys His Leu Val Gly Arg 490 Val Thr Arg Val Leu lle Asp Tyr Met Asp Tyr Val Pro Leu Cys Ala 500 505 510 Lys Leu Lys Ser Ala Leu Glu Val Gln Arg Glu Trp Pro Glu Ile Arg 520 Gln Ile Leu Glu Asn Pro Cys Ser Leu Lys His Leu Cys Arg Leu Lys 535 Ile Arg Arg Leu Met Gly Leu Gln Lys Leu Cys Gln Pro Ala Ser Val 550 555 560 545 Glu Lys Leu Pro Leu Pro Pro Ala Ile Gln Arg Tyr Ile Leu Phe Lys 570 565 575 Glu Tyr Asp Leu Tyr Gly Gln Glu Leu Lys Leu Thr 580 585

<210> 3241

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3241

Met Gln Gly Leu Ser Val Cys Leu Ser Phe Ser Leu Arg Asn Glu Asn
1 5 10 15

Pro Asp Leu Arg Ala Val Gln Leu Arg Ala His Tyr Leu Pro Ser Pro 20 25 30

Ser Arg Pro Gln Pro His His Pro Thr Cys Pro Leu Pro Pro Thr Ser 35 40 45

Ser Gly Ala Phe Ser Arg Cys Leu Met Val Gly Gly Phe Leu Met Gly 50 55 60

Gln Glu Arg Arg Ala Ser Ser Cys Asp Ser Thr Val Trp Val Lys Cys
65 70 75 80

Pro Val Arg Ala Trp Cys Gly Glu Leu Ala Ser Glu Glu Pro Leu Val 85 90 95

Gly Lys Arg Glu Val Gly

<210> 3242 <211> 192 <212> PRT <213> Homo sapiens <400> 3242 Met Glu Arg Gln Pro Gly Pro Val Arg Gly Lys Leu Gln Ile Phe Gln 10 Lys Thr Glu Lys Asp Pro Gln Ala Arg Ala Gly Ser Pro Val Gln Glu 25 Tyr His Thr Ala Leu Val Ala Gly Asp Leu Asp His Leu Lys Pro Leu 35 40 45 Met Asp Gln Phe Phe Gln Asp Ala Asn Val Val Phe Glu Ile Asn Lys 55 Asp Glu Met Glu Trp Gln Val Lys Ser Pro Ala Thr Phe Gly Leu Ser 70 . 75 Gly Leu Trp Thr Leu Glu Tyr Lys Arg Glu Leu Thr Thr Pro Leu Cys 90 95 85 Ile Ala Ala Ala His Gly His Thr Ala Cys Val Arg His Leu Leu Gly 105 Arg Gly Ala Asp Pro Asp Ala Ser Pro Ala Gly Pro Arg Val Pro Asp 115 125 120

Arg lle Leu Arg Ser Pro Gly Leu Thr Ala Ala His Gly Ala Gly Ala

Ala Gln Pro Arg Leu Ser His Arg Val Ala Arg Arg Leu Pro Gln Gly

Ala Glu Asp Leu Cys Ile Cys Pro Arg Ser His Arg Gly Ala Phe Gln

Leu Leu Pro Ser Ala Leu Leu Val Arg Val Leu Glu Gly Ser Asp Ser

185

155

175

190

170

135

150

165

180

<210> 3243 <211> 315

<212> PRT <213> Homo sapiens <400> 3243 Met Met Ser Ser Val Ser Thr Glu Ser Lys Leu Gln Gln Ala Val Ser Leu Gln Gly Val Asp Pro Glu Thr Cys Met lle Val Phe Lys Asn His Trp Ala Gln Val Val Lys Ile Leu Glu Lys His Asp Pro Leu Lys Asn Thr Gln Ala Lys Tyr Gly Ser Ile Pro Pro Asp Glu Ala Ser Ala Val Gln Asn Tyr Val Glu His Met Leu Phe Leu Leu lle Glu Gln Ala Lys Asp Ala Ala Met Gly Pro 11e Leu Glu Phe Val Val Ser Glu Asn Ile Met Glu Lys Leu Phe Leu Trp Ser Leu Arg Arg Glu Phe Thr Asp Glu Thr Lys 11e Glu Gln Leu Lys Met Tyr Glu Met Leu Val Thr Gln Ser His Gln Pro Leu Leu His His Lys Pro 11e Leu Lys Pro Leu Met Met Leu Leu Ser Ser Cys Ser Glv Thr Thr Thr Pro Thr Val Glu Glu Lys Leu Val Val Leu Leu Asn Gln Leu Cys Ser 11e Leu Ala Lys Asp Pro Ser Ile Leu Glu Leu Phe Phe His Thr Ser Glu Asp Gln Gly Ala Ala Asn Phe Leu lle Phe Ser Leu Leu lle Pro Phe lle His Arg Glu Gly Ser Val Gly Gln Gln Ala Arg Asp Ala Leu Leu Phe Ile Met Ser Leu Ser Ala Glu Asn Thr Met Val Ala His His Ile Val Glu Asn Thr

Tyr Phe Cys Pro Val Leu Ala Thr Gly Leu Ser Gly Leu Tyr Ser Ser

Leu Pro Thr Lys Leu Glu Asp Glu Glu Asp Asp Phe Asp Ser Phe Ile Ala Glu Met Pro Ala Val Glu Thr Val Pro Ser Pro Phe Val Gly Arg Asp Glu Ala Ala Phe Ala Ser Arg His Pro Val Arg Thr Gln Ser Thr Pro Phe Thr Gly Pro Phe Ile Ser Val Val Leu

<210> 3244

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3244 Met Leu Asp Gly Leu Gln Arg Leu Arg Ser Gln Pro Lys Leu Ala Asp Val Thr Leu Leu Val Gly Gly Arg Glu Leu Pro Cys His Arg Gly Leu Leu Ala Leu Ser Ser Pro Tyr Phe His Ala Met Phe Ala Gly Asp Phe Ala Glu Ser Phe Ser Ala Arg Val Glu Leu Arg Asp Val Glu Pro Ala Val Val Gly Gln Leu Val Asp Phe Val Tyr Thr Gly Arg Leu Thr Ile Thr Gln Gly Asn Val Glu Ala Leu Thr Arg Thr Ala Ala Arg Leu His Phe Pro Ser Val Gln Lys Val Cys Gly Arg Tyr Leu Gln Gln Leu Asp Ala Ala Asn Cys Leu Gly Ile Cys Glu Phe Gly Glu Gln Gln Gly

Leu Leu Gly Val Ala Ala Lys Ala Trp Ala Phe Leu Arg Glu Asn Phe

Glu Ala Val Ala Arg Glu Asp Glu Phe Leu Gln Leu Pro Arg Glu Arg

Leu	Val	Thr	Cys	Leu	Ala	G1y	Asp	Leu	Leu	Gln	Val	Gln	Pro	Glu	Glr
				165					170					175	
Gly	Arg	Leu	Glu	Ala	Leu	Met	Arg	Trp	Val	Arg	His	Asp	Pro	G1n	Ala
			180					185					190		
Arg	Ala	Val	His	Leu	Pro	Glu	Leu	Leu	Ser	Leu	Val	His	Leu	Asp	Αlε
		195					200					205			
Val	Pro	Arg	Pro	Cys	Va1	Gln	Gln	Leu	Leu	Ala	Ser	Glu	Pro	Leu	116
	210					215					220				
Gln	Glu	Ser	Glu	Ala	Cys	Arg	Ala	Ala	Leu	Ser	Gln	Gly	His	Asp	Gly
225					230					235					240
Ala	Pro	Leu	Ala	Leu	Gln	Gln	Lys	Leu	Glu	Glu	Val	Leu	Val	Val	Va]
				245					250					255	
Gly	Gly	Gln	Ala	Leu	Glu	Glu	Glu	Glu	Ala	Gly	Glu	Glu	Pro	Thr	Pro
			260					265					270		
Gly	Leu	Gly	Asn	Phe	Ala	Phe	Tyr	Asn	Ser	Lys	Ala	Lys	Arg	Trp	Met
		275					280					285			
Ala	Leu	Pro	Asp	Phe	Pro	Asp	Tyr	His	Lys						
	290					295									

<210> 3245

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3245

Met Cys Arg Cys Arg Arg Tyr Arg Arg Gly Arg Val Trp Gly Gly
1 5 10 15

Ala Gly Asp Ser Arg Ala Ala Gly Asn Arg Ser Gly Ser Gly Ala Ala 20 25 30

Pro Gly Leu Arg Trp Gly Gly Val Arg His Trp Pro His Leu Val 11e 35 40 45

Pro Ala Ala His Arg Pro Gln Phe Pro Arg Leu Leu Asn Gly Tyr Ala 50 55 60

Gly Gly Ala Thr Gly Trp Ile Trp Ile Arg Ile Arg Gly Ile Gly 1le 65 70 75 80 Gly Ala Ser Cys Val Leu Gly Val Ser Cys Asn Leu Glu Leu Gly Val

85

Ala Arg Phe Val Pro Gln Phe Pro Cys Ile Val Gly Asp Gly Ala

100

105

110

<210> 3246

<211> 676

<212> PRT

<213> Homo sapiens

<400> 3246

Met Glu Pro Arg Gly Gly Gly Ser Ser Gln Phe Ser Ser Cys Pro Gly

1 5 10 15

Pro Ala Ser Ser Gly Asp Gln Met Gln Arg Leu Leu Gln Gly Pro Ala

Pro Arg Pro Pro Gly Glu Pro Pro Gly Ser Pro Lys Ser Pro Gly His

20 25 30

35 40 45

Ser Thr Gly Ser Gln Arg Pro Pro Asp Ser Pro Gly Ala Pro Pro Arg
50 55 60

Ser Pro Ser Arg Lys Lys Arg Arg Ala Val Gly Ala Lys Gly Gly Gly 65 70 75 80

His Thr Gly Ala Ser Ala Ser Ala Gln Thr Gly Ser Pro Leu Leu Pro 85 90 95

Ala Ala Ser Pro Glu Thr Ala Lys Leu Met Ala Lys Ala Gly Gln Glu 100 105 110

Glu Leu Gly Pro Gly Pro Ala Gly Ala Pro Glu Pro Gly Pro Arg Ser 115 120 125

Pro Val Gln Glu Asp Arg Pro Gly Pro Gly Leu Gly Leu Ser Thr Pro 130 135 140

Val Pro Val Thr Glu Gln Gly Thr Asp Gln Ile Arg Thr Pro Arg Arg 145 150 155 160

Ala Lys Leu His Thr Val Ser Thr Thr Val Trp Glu Ala Leu Pro Asp 165 170 175

Val Ser Arg Ala Lys Ser Asp Met Ala Val Ser Thr Pro Ala Ser Glu 180 185 190

Pro	Gln	Pro	Asp	Arg	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro
		195					200					205			
Gln	Ser	Asp	Arg	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	Gln
	210					215					220				
Pro	Asp	Thr	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	Gln	Pro
225					230					235					240
Asp	Arg	Asp	Met	Ala	Val	Ser	Ile	Pro	Ala	Ser	Lys	Pro	G1n	Ser	Asp
				245					250					255	
Thr	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	Gln	Ser	Ser	Val	Ala	Leu
			260					265					270		
Ser	Thr	Pro	Пе	Ser	Lys	Pro	Gln	Leu	Asp	Thr	Asp	Val	Ala	Val	Ser
		275					280					285			
Thr	Pro	Ala	Ser	Lys	His	Gly	Leu	Asp	Val	Ala	Leu	Pro	Thr	Ala	Gly
	290					295					300				
Pro	Val	Ala	Lys	Leu	Glu	Val	Ala	Ser	Ser	Pro	Pro	Val	Ser	Glu	Ala
305					310					315					320
Val	Pro	Arg	Met	Thr	Glu	Ser	Ser	Gly	Leu	Val	Ser	Thr	Pro	Val	Pro
				325					330					335	
Arg	Ala	Asp	Ala	Ala	Gly	Leu	Ala	Trp	Pro	Pro	Thr	Arg	Arg	Ala	Gly
			340					345					350		
Pro	Asp	Val	Val	Glu	Met	Glu	Ala	Val	Va]	Ser	Glu	Pro	Ser	Ala	Gly
		355					360					365			
Ala	Pro	Gly	Cys	Cys	Ser	Gly	Ala	Pro	Ala	Leu	Gly	Leu	Thr	Gln	Val
	370					375					380				
Pro	Arg	Lys	Lys	Lys	Val	Arg	Phe	Ser	Val	Ala	Gly	Pro	Gly	Pro	Asn
385					390					395					400
Lys	Pro	Gly	Ser	Gly	Gln	Ala	Ser	Ala	Arg	Pro	Ser	Ala	Leu	G1n	Thr
				405					410					415	
Ala	Thr	Gly	Ala	His	G1 y	Gly	Pro	G1 y	Ala	Trp	Glu	Ala	Va]	Ala	Val
			420					425					430		
G1 y	Pro	Arg	Pro	His	Gln	Pro	Arg	He	Leu	Lys	His	Leu	Pro	Arg	Pro
		435					440					445			
Pro	Pro	Ser	Ala	Val	Thr	Arg	Val	Gly	Pro	G1 y	Ser	Ser	Phe	Ala	Val
	450					455					460				
Thr	Leu	Pro	G1u	Ala	Tyr	Glu	Phe	Phe	Phe	Cys	Asp	Thr	He	Glu	Glu

465					470					475					480
Asn	Glu	Glu	Ala	Glu	Ala	Ala	Ala	Ala	Gly	Gln	Asp	Pro	Ala	Gly	Va]
				485					490					495	
Gln	Trp	Pro	Asp	He	Cys	Glu	Phe	Phe	Phe	Pro	Asp	Val	Gly	Ala	Gln
			500					505					510		
Arg	Ser	Arg	Arg	Arg	Gly	Ser	Pro	Glu	Pro	Leu	Pro	Arg	Ala	Asp	Pro
		515					520					525			
Val	Pro	Λla	Pro	Ile	Pro	Gly	Asp	Pro	Val	Pro	Ile	Ser	Ile	Pro	Glu
	530					535					540				
Val	Tyr	Glu	His	Phe	Phe	Phe	Gly	Glu	Asp	Arg	Leu	Glu	Gly	Val	Leu
545					550					555					560
Gly	Pro	Ala	Val	Pro	Leu	Pro	Leu	Gln	Ala	Leu	Glu	Pro	Pro	Arg	Ser
				565					570					575	
Ala	Ser	Glu	Gly	Ala	Gly	Pro	Gly	Thr	Pro	Leu	Lys	Pro	Ala	Val	Val
			580					585					590		
Glu	Arg	Leu	His	Leu	Ala	Leu	Arg	Arg	Ala	Gly	Glu	Leu	Arg	Gly	Pro
		595					600					605			
Val	Pro	Ser	Ser	Ala	Phe	Ser	Gln	Asn	Asp	Met	Cys	Leu	Val	Phe	Val
	610					615					620				
Ala	Phe	Ala	Thr	Trp	Ala	Val	Arg	Thr	Ser	Asp	Pro	His	Thr	Pro	Asp
625					630					635					640
Ala	Trp	Lys	Thr	Ala	Leu	Leu	Ala	Asn	Val	Gly	Thr	He	Ser	Ala	He
				645					650					655	
Arg	Tyr	Phe	Arg	Arg	Gln	Val	Gly	Gln	Gly	Arg	Arg	Ser	His	Ser	Pro
			660					665					670		
Ser	Pro	Ser	Ser												
		675													

<210> 3247

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3247

Met Ser Ser Asn Gln Cys Pro Gly Val His Gly Ser Ser Leu Ala Tyr

Cys Ser Gly Leu His Ser Leu Gly His Cys Cys Leu Cys Arg Tyr Lys Lys Lys Lys Glu Lys Gln Lys Lys Glu Gly Thr Ala Ala Ser Gln Asn Val Asn Gln Asn Ile Ser Leu Trp Tyr Trp Glu Arg Lys Arg Arg Phe Pro Arg Glu Asp Glu Asp Gln Thr Asp Cys Arg Pro Ala Ile Ser Leu His Cys Thr Trp Ile Gly His Leu Leu Tyr Ala Pro Gly Lys Lys Ile Gln Arg Thr Met Leu Leu <210> 3248 <211> 143 <212> PRT <213> Homo sapiens <400> 3248 Met Ala Asp His Asn Pro Asp Ser Asp Ser Thr Pro Arg Thr Leu Leu Arg Arg Val Leu Asp Thr Ala Asp Pro Arg Thr Pro Arg Arg Pro Arg Ser Ala Arg Ala Gly Ala Arg Arg Ala Leu Leu Glu Thr Ala Ser Pro Arg Lys Leu Ser Gly Gln Thr Arg Thr lle Ala Arg Gly Arg Ser His Gly Ala Arg Val Ser Thr Gln Pro Thr Asp Pro Lys Gly Pro Trp Leu Pro Arg Gly Gly Leu Arg Ser Ser Ser Ala Leu Glu Pro Thr Leu Arg Lys Ser Gln Gly Arg Arg Thr Asp Trp Leu Leu Gly Ala Leu Pro

Ile Val Cys Trp Gln Ile Gly Pro Tyr Ser Gly Gln Trp Ala Leu Gly

115

125

Gly Thr Asp Thr Ser Asp Ala Ala Glu Glu His Pro Thr Asn Trp 135 <210> 3249 <211> 103 <212> PRT <213> Homo sapiens <400> 3249 Met Lys Glu Lys Ile Leu Arg Ala Ala Arg Glu Lys Gly Arg Ala Thr 5 10 His Lys Gly Lys Pro Ile Ser Leu Thr Ala Asp Leu Ser Thr Glu Thr 25 Leu Gln Ala Arg Arg Glu Trp Gly Pro Ile Phe Asn lle Leu Lys Glu 40 Lys Asn Phe Gln Pro Arg Ile Ser Tyr Pro Ala Lys Leu Ser Phe Ile 50 55 60 Ser Glu Gly Glu lle Lys Ser Phe Thr Asp Lys Arg Ile Leu Arg Asp 65 70 75 Phe Val Thr Thr Arg Pro Ala Leu Gln Gly Leu Leu Lys Glu Ala Leu 85 90 Asn Met Glu Arg Lys Asn Trp 100 <210> 3250 <211> 367 <212> PRT <213> Homo sapiens ⟨400⟩ 3250 Met Arg Gln Lys Ile Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys 5 1 10 15 Thr Gly Phe Ile Ala Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys

			20					25					30		
G1n	Gln	Phe	Ser	Thr	Leu	Ala	Val	Arg	Met	Pro	Asn	۸rg	Thr	Arg	Arg
		35					40					45			
Pro	Gly	Thr	Gln	Met	Val	Cys	Thr	Phe	Cys	Pro	Pro	Pro	Leu	Pro	Lys
	50					55					60				
Pro	Ser	Ser	Thr	Thr	Pro	Thr	Pro	Leu	Val	Ser	Glu	Thr	Gly	Gly	Asn
65					70					75					80
Ser	Pro	Ser	Asp	Lys	Val	Asp	Asn	Glu	Leu	Lys	Asn	Leu	Glu	His	Leu
				85					90					95	
Ser	Ser	Phe	Ser	Ser	Asp	Glu	Asp	Asp	Pro	Gly	Tyr	Ser	Gln	Asp	Ala
			100					105					110		
Tyr	Lys	Ser	Val	Ser	Thr	Pro	Leu	Thr	Thr	Leu	Asp	Ala	Thr	Ser	Asp
		115					120					125			
Lys	Lys	Lys	Lys	Thr	Glu	Ala	Leu	GIn	Val	Ala	Thr	Thr	Ser	Pro	Thr
	130					135					140				
Ala	Asn	Thr	Thr	Gly	Thr	Ala	Thr	Thr	Ser	Ser	Thr	Thr	Val	Gly	Ala
145					150					155					160
Val	Lys	Gln	Glu		Leu	His	Ser	Thr		Tyr	Ala	Val	Asn		Leu
				165					170					175	
Glu	Asn	He		Ser	Ser	Glu	Ser		Lys	Pro	He	Glu		Asp	Gly
	_	_	180					185					190		0.1
Leu	Pro		Asp	Gin	Phe	Ala		Gly	GIn	Asp	Thr		Ala	He	Glu
C.1	131	195		C 3	61		200	61	C	C1	C I	205	C I	C1	т.
Gly		Ihr	Asp	GIU	GJu	Asp	lhr	61u	Ser	61 y		61u	ыу	GIN	lyr
A	210	A	Λ	C1	DL -	215 V-1	V 1		т1	C1	220	11.	C1	Than	Dha
Arg 225	GJU	Arg	Asp	GIU	230	Val	vai	Lys	116		ASP		Giu	1111	240
	Clu	Al a	Lou	Lvc		Gly	Lve	Glu	Pro				Trn	Lve	
Lys	Olu	мта	Leu	245	1113	Oly	Lys	oru	250	110	MIa	116	пр	255	101
Gln	Lve	Ala	ارم ا		Gln	Lys	Phe	Val		Val	He	Aro	Asn		Gln
0111	Lys	MIG	260	LCu	OIII	Ly.o	1110	265	110	,	110	5	270	01;	0111
Arø	Glu	Phe		Ala	Thr	Asn	Ser		Leu	G1 v	Tvr	Phe		Asp	Ala
	0.0	275	,,,,				280	- , -		,	- , -	285		,	
Lvs	Ser		Tvr	Lvs	Arg	He		Val	Lvs	Phe	He		Asn	Ala	Asn
	290		- 2 -		- 0	295			, ,		300				
Lvs		Glu	Tvr	Val	Arg	Val	Cvs	Ser	Lvs	Lvs		Arg	Asn	Lvs	Pro

<210> 3251

<211> 1367

<212> PRT

<213> Homo sapiens

<400> 3251

Met Gly Asn Ser Asp Ser Gln Tyr Thr Leu Gln Gly Ser Lys Asn His

1 5 10 15

Ser Asn Thr Ile Thr Gly Ala Lys Gln Ile Pro Cys Ser Leu Lys Ile 20 25 30

Arg Gly Ile His Ala Lys Glu Glu Lys Ser Leu His Gly Trp Gly His
35 40 45

Gly Ser Asn Gly Ala Gly Tyr Lys Ser Arg Ser Leu Ala Arg Ser Cys
50 55 60

Leu Ser His Phe Lys Ser Asn Gln Pro Tyr Ala Ser Arg Leu Gly Gly
65 70 75 80

Pro Thr Cys Lys Val Ser Arg Gly Val Ala Tyr Ser Thr His Arg Thr
85 90 95

Asn Ala Pro Gly Lys Asp Phe Gln Gly Ile Ser Ala Ala Phe Ser Thr 100 105 110

Glu Asn Gly Phe His Ser Val Gly His Glu Leu Ala Asp Asn His Ile 115 120 125

Thr Ser Arg Asp Cys Asn Gly His Leu Leu Asn Cys Tyr Gly Arg Asn 130 135 140

Glu Ser Ile Ala Ser Thr Pro Pro Gly Glu Asp Arg Lys Ser Pro Arg 145 150 155 160

Val Leu Ile Lys Thr Leu Gly Lys Leu Asp Gly Cys Leu Arg Val Glu

				165					170					175	
Phe	His	Asn	Gly	Gly	Asn	Pro	Ser	Lys	Val	Pro	Ala	Glu	Asp	Cys	Ser
			180					185					190		
Glu	Pro	Val	Gln	Leu	Leu	Arg	Tyr	Ser	Pro	Thr	Leu	Ala	Ser	Glu	Thr
		195					200					205			
Ser	Pro	Val	Pro	Glu	Ala	Arg	Arg	G1 y	Ser	Ser	Ala	Asp	Ser	Leu	Pro
	210					215					220				
Ser	His	Arg	Pro	Ser	Pro	Thr	Asp	Ser	Arg	Leu	Arg	Ser	Ser	Lys	Gly
225					230					235					240
Ser	Ser	Leu	Ser	Ser	Glu	Ser	Ser	Trp	Tyr	Asp	Ser	Pro	Trp	Gly	Asn
				245					250					255	
Ala	Gly	Glu	Leu	Ser	Glu	Ala	Glu	Gly	Ser	Phe	Leu	Ala	Pro	Gly	Met
			260					265					270		
Pro	Asp		Ser	Leu	His	Ala	Ser	Phe	Pro	Pro	Gly	Asp	Ala	Lys	Lys
		275					280					285			
Pro		Asn	Gln	Ser	Ser		Leu	Ser	Ser	Leu		Glu	Leu	Tyr	Lys
	290					295		_			300				
	Ala	Asn	Leu	Gly	Ser	Leu	Ser	Pro	Ser		He	Arg	Leu	Ser	
305	rn.		61	mı	310					315				•	320
Glu	Tyr	Met	Gly		His	Ala	Ser	Leu		Asn	His	Val	Ser		Ala
C		T 1		325	D	C		17 3	330		C1		D	335	61
Ser	Asp	11e		vai	Pro	Ser	Arg		Ala	HIS	Gly	Asp		He	61n
т	C	C a u	340	Tlass	1	Dava	Cur	345	1	Dava	1	41 +	350	V = 1	C1
Tyr	ser	355	rne	mr	Leu	Pro	360	Arg	Lys	rro	Lys	365	rne	vai	GIU
Aen	Thr		Lve	Lve	Asp	Sor		lve	Δla	Ara	Mot		Ara	110	Sor
пэр	370	MIG	Lys	Lys	пър	375		Lys	MIA	Aig	380	AI g	nı g	116	261
Asn	0.0	Thr	Glv	Ser	Leu	0.0		lvs	Lvs	Arσ	000	Len	Gln	Glu	Pro
385	,		01,	501	390	001	6	13,0	Lyo	395	Lyo	Вец	0111	014	400
	Ser	Lvs	Glu	Glv	Ser	Asp	Tvr	Phe	Asp		Arg	Ser	Asp	Glv	
6				405		,	- , -		410		0			415	
Asn	Thr	Asp	Val	Gln	Gly	Ser	Ser	Gln	Ala	Ser	Ala	Phe	Leu		Ser
		•	420		-			425					430	•	
Gly	Gly	Ser	Thr	Gln	He	Leu	Ser	Gln	Arg	Ser	Glu	Ser	Thr	His	Ala
	-	435					440					445			
He	Glv	Ser	Asp	Pro	Leu	Arg	Gln	Asn	He	Tvr	Glu	Asn	Phe	Met	Arg

	450					455					460				
Glu	Leu	Glu	Met	Ser	Arg	Thr	Asn	Thr	Glu	Asn	He	Glu	Thr	Ser	Thr
465					470					475					480
Glu	Thr	Ala	Glu	Ser	Ser	Ser	Glu	Ser	Leu	Ser	Ser	Leu	Glu	G1n	Leu
				485					490					495	
Asp	Leu	Leu	Phe	Glu	Lys	Glu	G1n	Gly	Val	Val	Arg	Lys	Ala	Gly	Trp
			500					505					510		
Leu	Phe	Phe	Lys	Pro	Leu	Val	Thr	Val	Gln	Lys	Glu	Arg	Lys	Leu	Glu
		515					520					525			
Leu	Val	Ala	Arg	Arg	Lys	Trp	Lys	Gln	Tyr	Trp	Val	Thr	Leu	Lys	Gly
	530					535					540				
Cys	Thr	Leu	Leu	Phe	Tyr	Glu	Thr	Tyr	Gly	Lys	Asn	Ser	Met	Asp	G1n
545					550					555					560
Ser	Ser	Ala	Pro	Arg	Cys	Ala	Leu	Phe	Ala	Glu	Asp	Ser	He	Val	Gln
				565					570					575	
Ser	Val	Pro	Glu	His	Pro	Lys	Lys	Glu	Asn	Val	Phe	Cys	Leu	Ser	Asn
			580					585					590		
Ser	Phe	Gly	Asp	Val	Tyr	Leu	Phe	Gln	Ala	Thr	Ser	Gln	Thr	Asp	Leu
		595					600					605			
Glu	Asn	Trp	Val	Thr	Ala	Val	His	Ser	Ala	Cys	Ala	Ser	Leu	Phe	Ala
	610					615					620				
Lys	Lys	His	Gly	Lys	Glu	Asp	Thr	Leu	Arg	Leu	Leu	Lys	Asn	Gln	Thr
625					630					635					640
Lys	Asn	Leu	Leu	Gln	Lys	11e	Asp	Met	Asp	Ser	Lys	Met	Lys	Lys	Met
				645					650					655	
Ala	Glu	Leu	Gln	Leu	Ser	Val	Val	Ser	Asp	Pro	Lys	Asn	Arg	Lys	Ala
			660					665					670		
He	Glu	Asn	Gln	11e	Gln	Gln	Trp	Glu	Gln	Asn	Leu	Glu	Lys	Phe	His
		675					680					685			
Meı	Asp	Leu	Phe	Arg	Met	Arg	Cys	Tyr	Leu	Ala	Ser	Leu	Gln	Gly	Gly
	690					695					700				
Glu	Leu	Pro	Asn	Pro	Lys	Ser	Leu	Leu	Ala	Ala	Ala	Ser	Arg	Pro	Ser
705					710					715					720
Lys	Leu	Ala	Leu	Gly	Arg	Leu	Gly	lle	Leu	Ser	Val	Ser	Ser	Phe	His
				725					730					735	

Ala	Leu	Val	Cys	Ser	Arg	Asp	Asp	Ser	Ala	Leu	Arg	Lys	Arg	Thr	Leu
			740					745					750		
Ser	Leu	Thr	Gln	Arg	Gly	Arg	Asn	Lys	Lys	Gly	He	Phe	Ser	Ser	Leu
		755					760					765			
Lys	Gly	Leu	Asp	Thr	Leu	Ala	Arg	Lys	Gly	Lys	Glu	Lys	Arg	Pro	Ser
	770					775					780				
Пе	Thr	Gln	Val	Asp	Glu	Leu	Leu	His	He	Tyr	Gly	Ser	Thr	Val	Asp
785					790					795					800
Gly	Val	Pro	Arg	Asp	Asn	Ala	Trp	Glu	He	Gln	Thr	Tyr	Val	His	Phe
				805					810					815	
Gln	Asp	Asn	His	Gly	Val	Thr	Val	Gly	lle	Lys	Pro	Glu	His	Arg	Val
			820					825					830		
Glu	Asp	He	Leu	Thr	Leu	Ala	Cys	Lys	Met	Arg	Gln	Leu	Glu	Pro	Ser
		835					840					845			
His	Tyr	Gly	Leu	Gln	Leu	Arg	Lys	Leu	Val	Asp	Asp	Asn	Val	G1u	Tyr
	850					855					860				
Cys	He	Pro	Ala	Pro	Tyr	Glu	Tyr	Met	Gln	Gln	Gln	Val	Tyr	Asp	Glu
865					870					875					880
He	Glu	Val	Phe	Pro	Leu	Asn	Val	Tyr	Asp	Val	Gln	Leu	Thr	Lys	Thr
				885					890					895	
Gly	Ser	Val	Cys	Asp	Phe	Gly	Phe	Ala	Val	Thr	Ala	Gln	Val	Asp	Glu
			900					905					910		
Arg	Gln	His	Leu	Ser	Arg	He	Phe	11e	Ser	Asp	Val	Leu	Pro	Asp	Gly
		915					920					925			
Leu	Ala	Tyr	Gly	Glu	Gly	Leu	Arg	Lys	Gly	Asn	Glu	He	Met	Thr	Leu
	930					935					940				
Asn	Gly	G]u	Ala	Val	Ser	Asp	Leú	Asp	Leu	Lys	Gln	Met	Glu	Ala	Leu
945					950					955					960
Phe	Ser	Glu	Lys	Ser	Val	Gly	Leu	Thr	Leu	He	Ala	Arg	Pro	Pro	Asp
				965					970					975	
Thr	Lys	Ala	Thr	Leu	Cys	Thr	Ser	Trp	Ser	Asp	Ser	Asp	Leu	Phe	Ser
			980					985					990		
Arg	Asp	Gln	Lys	Ser	Leu	Leu	Pro	Pro	Pro	Asn	Gln	Ser	Gln	Leu	Leu
		995					1000					005			
Glu	Glu	Phe	Leu	Asp	Asn	Phe	Lys	Lys	Asn	Thr	Ala	Asn	Asp	Phe	Ser
1	1010					1015					1020				

Asn	Val	Pro	Asp	He	Thr	Thr	Gly	Leu	Lys	Arg	Ser	Gln	Thr	Asp	Gly
1025	5]	1030					1035]	1040
Thr	Leu	Asp	Gln	Val	Ser	His	Arg	Glu	Lys	Met	Glu	Gln	Thr	Phe	Arg
]	045					1050				-	1055	
Ser	Ala	Glu	Gln	He	Thr	Ala	Leu	Cys	Arg	Ser	Phe	Asn	Asp	Ser	Gln
]	060					1065				1	1070		
Ala	Asn	Gly	Met	Glu	Gly	Pro	Arg	Glu	Asn	Gln	Asp	Pro	Pro	Pro	Arg
		1075]	1080					1085			
Pro	Leu	Ala	Arg	His	Leu	Ser	Asp	Ala	Asp	Arg	Leu	Arg	Lys	Val	Ile
1	1090]	1095]	100				
Gln	Glu	Leu	Val	Asp	Thr	Glu	Lys	Ser	Tyr	Val	Lys	Asp	Leu	Ser	Cys
1105	5]	1110					1115]	1120
Leu	Phe	Glu	Leu	Tyr	Leu	Glu	Pro	Leu	Gln	Asn	Glu	Thr	Phe	Leu	Thr
]	125					1130				j	135	
Gln	Asp	Glu	Met	G1u	Ser	Leu	Phe	Gly	Ser	Leu	Pro	Glu	Met	Leu	Glu
		.]	140					1145]	1150		
Phe	Gln	Lys	Val	Phe	Leu	Glu	Thr	Leu	Glu	Asp	Gly	Ile	Ser	Ala	Ser
		1155]	1160					1165			
Ser	Asp	Phe	Asn	Thr	Leu	Glu	Thr	Pro	Ser	Gln	Phe	Arg	Lys	Leu	Leu
]	170]	1175]	180				
Phe	Ser	Leu	Gly	G1y	Ser	Phe	Leu	Tyr	Tyr	Ala	Asp	His	Phe	Lys	Leu
1185	5			1	1190				1	1195]	1200
Tyr	Ser	Gly	Phe	Cys	Ala	Asn	His	Пe	Lys	Val	Gln	Lys	Val	Leu	Glu
]	205				1	1210]	215	
Arg	Ala	Lys	Thr	Asp	Lys	Ala	Phe	Lys	Ala	Phe	Leu	Asp	Ala	Arg	Asn
		j	220					1225				1	1230		
Pro	Thr	Lys	Gln	His	Ser	Ser	Thr	Leu	Glu	Ser	Tyr	Leu	Ile	Lys	Pro
		1235]	1240]	1245			
Val	G]n	Arg	Val	Leu	Lys	Tyr	Pro	Leu	Leu	Leu	Lys	Glu	Leu	Val	Ser
ŀ	250				J	1255]	260				
Leu	Thr	Asp	Gln	Glu	Ser	G] u	G] u	His	Tyr	His	Leu	Thr	Glu	Ala	Leu
1265	5			1	270]	1275				3	280
Lys	Ala	Met	Glu	Lys	Val	Ala	Ser	His	Пе	Asn	Glu	Met	G]n	Lys	He
			I	285]	290				1	295	
Tyr	Glu	Asp	Tyr	Gly	Thr	Val	Phe	Asp	Arg	Leu	Val	Ala	G1u	Gln	Ser
			300					1305					310		

Gly Thr Glu Lys Glu Val Thr Glu Leu Ser Met Gly Glu Leu Leu Met

1315
1320
1325

His Ser Thr Val Ser Trp Leu Asn Pro Phe Leu Ser Leu Gly Lys Ala
1330
1335
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Arg Lys Asp Leu Glu Leu Thr Val Phe Val Phe Lys Arg Ala Val Ile
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Leu Val Tyr Lys Glu Asn Cys
1365

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<211> 238

<212> PRT

<213> Homo sapiens

⟨400⟩ 3252

 Met
 Ile
 Ser
 Ser
 Tyr
 Leu
 Val
 Cys
 Leu
 Phe
 Thr
 Asp
 Thr
 Ile
 Arg
 Tyr

 1
 5
 5
 10
 10
 15
 15
 15

 Leu
 Ser
 Leu
 His
 Asp
 Asn
 Lys
 Tyr
 Ile
 Arg
 Tyr
 Phe
 Pro
 Gly
 His
 Ser

 Lys
 Arg
 Val
 Val
 Ala
 Leu
 Ser
 Met
 Ser
 Pro
 Val
 Asp
 Asp
 Thr
 Phe
 Ile
 Arg
 Thr
 Phe
 Ile
 Arg
 85 90 95 Lys Leu Tyr Asp Leu Arg Ser Phe Asp Lys Gly Pro Phe Ala Thr Phe

Lys Leu Tyr Asp Leu Arg Ser Phe Asp Lys Gly Pro Phe Ala Thr Phe 100 105 110

Lys Met Gln Tyr Asp Arg Thr Cys Glu Trp Thr Gly Leu Lys Phe Ser 115 120 125

Asn Asp Gly Lys Leu Ile Leu Ile Ser Thr Asn Gly Ser Phe Ile Arg 130 135 140

Leu Ile Asp Ala Phe Lys Gly Val Val Met His Thr Phe Gly Gly Tyr 145 150 155 160 Ala Asn Ser Lys Ala Val Thr Leu Glu Ala Ser Phe Thr Pro Asp Ser 165 170 Gln Phe lle Met Ile Gly Ser Glu Asp Gly Lys Ile His Val Trp Asn 180 185 190 Gly Glu Ser Gly Ile Lys Val Ala Val Leu Asp Gly Lys His Thr Gly 200 205 Pro lle Thr Cys Leu Gln Phe Asn Pro Lys Phe Met Thr Phe Ala Ser 215 220 Ala Cys Ser Asn Met Ala Phe Trp Leu Pro Thr Ile Asp Asp 230 235 225

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<213> Homo sapiens

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Met Gln Glu Ala Thr Leu Ser His Pro Arg Tyr Cys Pro His Thr Gln

1 5 10 15

Ala Ala Ala Leu Asn Ile Pro His Asn Lys Ala Lys Gly Ser Asp Lys

20 25 30 Ser Tyr Tyr Ser Gln Pro Ser His Leu Glu Thr Arg Gly Glu Thr Asn

35 40 45

Leu Pro Leu Asp Val Leu Arg Glu Arg Gln Asp Pro Gln Arg Asn Leu 50 55 60

Ser Glu Leu Ser Thr Cys Leu lle Gln Gln Asp Arg Asp Gly Arg Arg 65 70 75 80

Leu Ala Phe Ser Phe Ala Trp Val Ser Thr Ile Leu Gln Gly Lys Leu 85 90 95

Cys Gly Gln Leu Gly Asn Thr Thr 11e Asn Trp Arg Gly Met Asn Asn 100 105 110

Arg Val Ser Gly Ala Val Cys

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                                 25
                                                     30
Ala Phe Gly Gly Gly Val Cys Cys Phe Glu His Leu Pro Gly Gly Asp
                             40
Pro Asp Asp Gly Asp Val Pro Leu Ala Leu Leu Arg Gly Glu Pro Gly
     50
                         55
Leu His Leu Ala Pro Gly Thr Asp Asp His Asn His His Leu Ala Leu
                     70
Asp Pro Cys Leu Ser Asp Glu Asn Tyr Asp Phe Ser Ser Ala Glu Ser
                 85
                                     90
Gly Ser Ser Leu Arg Tyr Tyr Ser Glu Gly Glu Ser Gly Gly Gly
            100
                                105
                                                    110
Gly Gly Ser Ser Leu Ser Leu His Pro Pro Gln Gln Pro Pro Leu Val
                            120
Pro Thr Asn Ser Gly Gly Gly Gly Ala Thr Gly Gly Ser Pro Gly Glu
    130
                        135
                                            140
Arg Lys Arg Thr Arg Leu Gly Gly Pro Ala Ala Arg His Arg Tyr Glu
                    150
                                                            160
Val Val Thr Glu Leu Gly Pro Glu Glu Val Arg Trp Phe Tyr Lys Glu
                165
                                   170
Asp Lys Lys Thr Trp Lys Pro Phe Ile Gly Tyr Asp Ser Leu Arg Ile
                                                190
            180
                                185
Glu Leu Ala Phe Arg Thr Leu Leu Gln Thr Thr Gly Ala Arg Pro Gln
                           200
                                                205
Gly Gly Asp Arg Asp Gly Asp His Val Cys Ser Pro Thr Gly Pro Ala
    210
                        215
                                            220
Ser Ser Gly Glu Asp Asp Glu Asp Arg Ala Cys Gly Phe Cys
```

G1:	n Ser	Thr	Thr	Gly 245	His	Glu	Pro	Glu	Met 250	Val	Glu	Leu	Val	Asn 255	He
Gl	u Pro	Val	Cys	Val	Arg	Gly	Gly	Leu	Tyr	Glu	Val	Asp	Val	Thr	Gln
			260					265					270		
G1	y Glu	Cys	Tyr	Pro	Val	Tyr	Trp	Asn	Gln	Ala	Asp	Lys	He	Pro	Val
		275					280					285			
Me	t Arg	Gly	Gln	Trp	Phe	He	Asp	Gly	Thr	Trp	Gln	Pro	Leu	Glu	Glu
	290					295					300				
Gl	u Glu	Ser	Asn	Leu	Ile	Glu	Gln	Glu	His	Leu	Asn	Cys	Phe	Arg	Gly
30	5				310					315					320
G1:	n Gln	Met	Gln	Glu	Asn	Phe	Asp	He	Glu	Val	Ser	Lys	Ser	Πle	Asp
				325					330					335	
61	y Lys	Asp	Gly	Ser	Gly	He	Asn	Tyr	Ser	Ala	Va]	His	Ser	Phe	Lys
			340					345			•		350		
Le	u Ser	_	Asn	His	Val	Asp	Trp	His	Ser	Val	Asp	Glu	Val	Tyr	Leu
		355					360					365			
Ty:	r Ser	Asp	Ala	Thr	Thr		Lys	He	Ala	Arg		Val	Thr	Gln	Lys
_	370		_			375					380				
	u Gly -	Phe	Ser	Lys		Ser	Ser	Ser	Gly		Arg	Leu	His	Arg	
38		C1	C1	A T	390	1	C1	Δ	1	395	C	C1	T1 -	TI -	400
IУ	r Val	GIU	Glu		ınr	Leu	61 u	Asp		Pro	Ser	GIN	Inr		H1\$
7.1	o Vol	Dha	Vol	405	u; o	C1	11.	C1	410	1	Mat	Aan	Cl.s	415	A 12.00
11	e Val	rne	vai	vai	nis	GTy	116	GIŸ	GIII	Lys	Met	ASP	GIN	GIY	Arg
			420					425					430		
11	e Ile	Lvs		Thr	Ala	Met	Met		Glu	Ala	Ala	Arø		He	Glu
		435					440	8	014			445	2,0	110	0.0
G]:	u Arg		Phe	Ser	Asn	His		Thr	His	Val	Glu		Leu	Pro	Val
	450					455					460				
Gl	u Trp	Arg	Ser	Lys	Leu	Thr	Leu	Asp	Gly	Asp	Thr	Val	Asp	Ser	He
46	5				470					475					480
Th	r Pro	Asp	Lys	Val	Arg	Gly	Leu	Arg	Asp	Met	Leu	Asn	Ser	Ser	Ala
				485					490					495	
Me	t Asp	He	Met	Tyr	Tyr	Thr	Ser	Pro	Leu	Tyr	Arg	Asp	Glu	Leu	Val
			500					505					510		
Ly.	s Gly	Leu	Gln	Gln	Glu	Leu	Asn	Arg	Leu	Tyr	Ser	Leu	Phe	Cys	Ser

		515					520					525			
Arg	Asn	Pro	Asp	Phe	Glu	Glu	Lys	Gly	G1 y	Lys	Val	Ser	He	Val	Ser
	530					535					540				
His	Ser	Leu	Gly	Cys	Val	lle	Thr	Tyr	Asp	Пe	Met	Thr	Gly	Trp	Asn
545					550					555					560
Pro	Val	Arg	Leu	Tyr	Glu	Gln	Leu	Leu	Gln	Lys	Glu	Glu	Glu	Leu	Pro
				565					570					575	
Asp	Glu	Arg	Trp	Met	Ser	Tyr	Glu	Glu	Arg	His	Leu	Leu	Asp	Glu	Leu
			580					585					590		
Tyr	He	Thr	Lys	Arg	Arg	Leu	Lys	Glu	Ile	Glu	Glu	Arg	Leu	His	Gly
		595					600					605			
Leu	Lys	Ala	Ser	Ser	Met	Thr	Gln	Thr	Pro	Ala	Leu	Lys	Phe	Lys	Val
	610					615					620				
Glu	Asn	Phe	Phe	Cys	Met	Gly	Ser	Pro	Leu	Ala	Val	Phe	Leu	Ala	Leu
625					630					635					640
Arg	Gly	lle	Arg	Pro	Gly	Asn	Thr	Gly	Ser	Gln	Asp	His	lle	Leu	Pro
				645					650					655	
Arg	Glu	Ile	Cys	Asn	Arg	Leu	Leu	Asn	Ile	Phe	His	Pro	Thr	Asp	Pro
			660					665					670		
Val	Ala	Tyr	Arg	Leu	Glu	Pro	Leu	He	Leu	Lys	His	Tyr	Ser	Asn	lle
		675					680					685			
Ser	Pro	Val	Gln	He	His	Trn	Tur			~		•••			
						пр	IyI	Asn	Thr	Ser	Asn	Pro	Leu	Pro	Tyr
Glu	690					695	Iyi	Asn	Thr	Ser	700	Pro	Leu	Pro	Tyr
		Met				695					700			Pro Thr	
705		Met				695					700				
	His		Lys	Pro	Ser 710	695 Phe	Leu	Asn	Pro	Ala 715	700 Lys	Glu	Pro		Ser 720
Val	His Ser	Glu	Lys Asn	Pro Glu 725	Ser 710 Gly	695 Phe Ile	Leu Ser	Asn Thr	Pro 11e 730	Ala 715 Pro	700 Lys Ser	Glu Pro	Pro Val	Thr Thr 735	Ser 720 Ser
Val	His Ser	Glu	Lys Asn	Pro Glu 725	Ser 710 Gly	695 Phe Ile	Leu Ser	Asn Thr	Pro 11e 730	Ala 715 Pro	700 Lys Ser	Glu Pro	Pro Val Asn	Thr Thr	Ser 720 Ser
Val Pro	His Ser Val	Glu Leu	Lys Asn Ser 740	Pro Glu 725 Arg	Ser 710 Gly Arg	695 Phe Ile His	Leu Ser Tyr	Asn Thr Gly 745	Pro 11e 730 Glu	Ala 715 Pro Ser	700 Lys Ser Ile	Glu Pro Thr	Pro Val Asn 750	Thr Thr 735 Ile	Ser 720 Ser Gly
Val Pro	His Ser Val	Glu Leu Ser	Lys Asn Ser 740	Pro Glu 725 Arg	Ser 710 Gly Arg	695 Phe Ile His	Leu Ser Tyr Ala	Asn Thr Gly 745	Pro 11e 730 Glu	Ala 715 Pro Ser	700 Lys Ser Ile	Glu Pro Thr	Pro Val Asn 750	Thr Thr 735	Ser 720 Ser Gly
Val Pro Lys	His Ser Val	Glu Leu Ser 755	Lys Asn Ser 740 Ile	Pro Glu 725 Arg Leu	Ser 710 Gly Arg	695 Phe Ile His	Leu Ser Tyr Ala 760	Asn Thr Gly 745 Ser	Pro 11e 730 Glu 11e	Ala 715 Pro Ser Gly	700 Lys Ser 11e Lys	Glu Pro Thr Gly 765	Pro Val Asn 750 Leu	Thr Thr 735 Ile Gly	Ser 720 Ser Gly
Val Pro Lys	His Ser Val Ala Leu	Glu Leu Ser 755	Lys Asn Ser 740 Ile	Pro Glu 725 Arg Leu	Ser 710 Gly Arg	695 Phe Ile His Ala	Leu Ser Tyr Ala 760	Asn Thr Gly 745 Ser	Pro 11e 730 Glu 11e	Ala 715 Pro Ser Gly	700 Lys Ser 11e Lys	Glu Pro Thr Gly 765	Pro Val Asn 750 Leu	Thr Thr 735 Ile	Ser 720 Ser Gly
Val Pro Lys Met	His Ser Val Ala Leu 770	Glu Leu Ser 755 Phe	Lys Asn Ser 740 Ile Ser	Pro Glu 725 Arg Leu	Ser 710 Gly Arg Gly Phe	695 Phe Ile His Ala Gly 775	Leu Ser Tyr Ala 760 Arg	Asn Thr Gly 745 Ser	Pro Ile 730 Glu Ile Ser	Ala 715 Pro Ser Gly	700 Lys Ser 11e Lys Thr 780	Glu Pro Thr Gly 765 Gln	Pro Val Asn 750 Leu Ser	Thr Thr 735 Ile Gly Ser	Ser 720 Ser Gly Gly
Val Pro Lys Met	His Ser Val Ala Leu 770	Glu Leu Ser 755 Phe	Lys Asn Ser 740 Ile Ser	Pro Glu 725 Arg Leu	Ser 710 Gly Arg Gly Phe	695 Phe Ile His Ala Gly 775	Leu Ser Tyr Ala 760 Arg	Asn Thr Gly 745 Ser	Pro Ile 730 Glu Ile Ser	Ala 715 Pro Ser Gly Thr	700 Lys Ser 11e Lys Thr 780	Glu Pro Thr Gly 765 Gln	Pro Val Asn 750 Leu Ser	Thr Thr 735 Ile Gly	Ser 720 Ser Gly Gly
Val Pro Lys Met Thr 785	His Ser Val Ala Leu 770 Ser	Glu Leu Ser 755 Phe	Lys Asn Ser 740 Ile Ser	Pro Glu 725 Arg Leu Arg	Ser 710 Gly Arg Gly Phe Met 790	695 Phe Ile His Ala Gly 775 Glu	Leu Ser Tyr Ala 760 Arg	Asn Thr Gly 745 Ser Ser	Pro 11e 730 Glu 11e Ser Lys	Ala 715 Pro Ser Gly Thr Lys 795	700 Lys Ser Ile Lys Thr 780 Pro	Glu Pro Thr Gly 765 Gln Val	Pro Val Asn 750 Leu Ser	Thr Thr 735 Ile Gly Ser	Ser 720 Ser Gly Gly Glu Pro 800

805 810 815 Phe Leu Asp Ser Ala Leu Glu Leu Asp His Arg Ile Asp Phe Glu Leu 820 825 Arg Glu Gly Leu Val Glu Ser Arg Tyr Trp Ser Ala Val Thr Ser His 835 840 845 Thr Ala Tyr Trp Ser Ser Leu Asp Val Ala Leu Phe Leu Leu Thr Phe 855 860 Met Tyr Lys His Glu His Asp Asp Asp Ala Lys Pro Asn Leu Asp Pro 870 875 880 He

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<212> PRT

<213> Homo sapiens

<400> 3255

Ala Lys Lys Gln Gly Asp His Tyr IIe Leu Asn Gly Ser Lys Ala Phe 50 55 60

Gly Gly Pro Gly Pro Lys Gly Ile Ser Cys Ile Val Val Glu Lys Gly 85 90 95

Thr Pro Gly Leu Ser Phe Gly Lys Lys Glu Lys Lys Val Ser Gly Cys
100 105 110

Trp Thr Gly Asn Asn Ser Gly Tyr Glu Thr Leu Pro Pro Ala Ser Pro
115 120 125

Thr Pro Ala Leu Phe Gln Lys Thr Gly Leu His Thr Cys

130 135 140

<210> 3256 <211> 254 <212> PRT <213> Homo sapiens

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Asn Phe Ser Phe Asp Tyr Tyr Ala Phe Leu Ile Leu Ile Met Ile Ser

<210> 3257

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3257

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Phe Arg Ser Glu Ala Ser His Pro Thr Gln Gly Pro Ser Thr Thr Ser 20 25 30

Pro Phe Ser Pro Phe Leu Gly Ala Asp Pro Gly Gly Ser Ile Tyr Arg 35 40 45

Gly Val Pro Gly Ser Leu Thr Ala Gly Thr Thr Glu Ala Arg Lys Ser 50 55 60

Cys Leu Ala Pro Ala Gln Gly Thr Gln Gly Arg Leu Gly Ala Pro Ala 65 70 75 80

Gly Ser His Ser Pro Arg Arg Gln Gly Leu Val Tyr Pro Cys Ala Met 85 90 95

Ser Val Ile Gly Leu Cys Ala Gly Ser Val Met Arg Ser Leu Pro Gly 100 105 110

Leu Pro Arg Pro Arg Arg

115

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<211> 804

<212> PRT

<213> Homo sapiens

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Ala	His	Gly	Leu	Ser	Leu	Glu	Ala	Pro	Thr	Val	Gly	Lys	Gly	Gln	Ala
			20					25					30		
Pro	Gly	lle	Glu	Glu	Thr	Asp	Gly	Glu	Leu	Thr	Ala	Ala	Pro	Thr	Pro
		35					40					45			
Glu	Gln	Pro	Glu	Arg	Gly	Val	His	Phe	Val	Thr	Thr	Ala	Pro	Thr	Leu
	50					55					60				
Lys	Leu	Leu	Asn	His	His	Pro	Leu	Leu	Glu	Glu	Phe	Leu	G1n	Glu	Gly
65					70					75					80
Leu	Glu	Lys	Gly	Asp	Glu	Glu	Leu	Arg	Pro	Ala	Leu	Pro	Phe	Gln	Pro
				85					90					95	
Asp	Pro	Pro	Ala	Pro	Phe	Thr	Pro	Ser	Pro	Leu	Pro	Arg	Leu	Ala	Asn
			100					105					110		
Gln	Asp	Ser	Arg	Pro	Val	Phe	Thr	Ser	Pro	Thr	Pro	Ala	Met	Ala	Ala
		115					120					125			
Val		Thr	Gln	Pro	G1n		Lys	Glu	Gly	Pro	Trp	Ser	Pro	Glu	Ser
	130					135					140				
Glu	Ser	Pro	Met	Leu	Arg	He	Thr	Ala	Pro	Leu	Pro	Pro	Gly	Pro	Ser
145					150					155					160
Met	Ala	Val	Pro		Leu	Gly	Pro	Gly	Glu	He	Ala	Ser	Thr	Thr	Pro
				165					170					175	
Pro	Ser	Arg		Trp	Thr	Pro	Thr		Glu	Gly	Pro	Gly		Met	Gly
	Б		180		6.1	., .	,, -	185	6.1	<i>a</i> :		0.1	190	0.1	
Arg	Pro	Trp	Val	Ala	Glu	Val		Ser	Gln	Gly	Ala		He	Gly	He
C 3	C1	195	7.7	TI	C	C	200 TI	A 7	C	63		205	C1	01	T)
GIn		Thr	11e	Ihr	Ser		Ihr	Ala	Ser	Gly		Asp	61u	Glu	ihr
Ti	210	T1	TI -	Tl	31.	215	ті -	TI ·	T1 -	71.	220 Thu	ть	V. 1	C1	TI.
	Ihr	Thr	Ihr	ınr		116	Inr	Inr	Inr		ınr	ınr	val	GIn	
225 Bra	C1	D	C	C	230 Tan	۸	DI	C	C 1	235 Pro	C1	C1	C	1	240
rro	ыу	Pro	Cys		ıгр	ASN	rne	ser		rro	618	61 y	ser		лѕр
C .	D	T1	Δ	245	c	C	D.	TI.	250	W. 1	C1	1	Δ	255 Cur	Di
ser	Pro	Thr		Leu	ser	ser	rro		Asp	val	01 y	Leu		Cys	rne
Dha	Tur	11	260 Sor	V ₀ 1	т	Dno	C1	265	C1	Vol	G1.	11.	270	Vol.	C1=
rne	ıyr	He	ser	val	ıyr	rro	01 y	ıyr	оту	vai	oru	116	Lys	vaı	oin

		275					280					285			
Asn	Ile	Ser	Leu	Arg	Glu	G1 y	Glu	Thr	Val	Thr	Val	Glu	Gly	Leu	Gly
	290					295					300				
Gly	Pro	Asp	Pro	Leu	Pro	Leu	Ala	Asn	Gln	Ser	Phe	Leu	Leu	Arg	Gly
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Gln	Val	He	Arg	Ser	Pro	Thr	His	Gln	Ala	Ala	Leu	Arg	Phe	G1n	Ser
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Leu	Pro	Pro	Pro	Ala	Gly	Pro	Gly	Thr	Phe	His	Phe	His	Tyr	Gln	Ala
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Tyr	Leu	Leu	Ser	Cys	His	Phe	Pro	Arg	Arg	Pro	Ala	Tyr	Gly	Asp	Val
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Thr	Val	Thr	Ser	Leu	llis	Pro	Gly	Gly	Ser	Ala	Arg	Phe	His	Cys	Ala
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Thr	Gly	Tyr	Gln	Leu	Lys	Gly	Λla	Arg	His	Leu	Thr	Cys	Leu	Asn	Ala
385					390					395					400
Thr	Gln	Pro	Phe	Trp	Asp	Ser	Lys	Glu	Pro	Val	Cys	He	Ala	Ala	Cys
				405					410					415	
Gly	Gly	Val	Ile	Arg	Asn	Ala	Thr	Thr	Gly	Arg	Ile	Val	Ser	Pro	Gly
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Phe	Pro	Gly	Asn	Tyr	Ser	Asn	Asn	Leu	Thr	Cys	His	Trp	Leu	Leu	Glu
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Ala	Pro	Glu	Gly	Gln	Arg	Leu	His	Leu	His	Phe	Glu	Lys	Val	Ser	Leu
	450					455					460				
Ala	Glu	Asp	Asp	Asp	Arg	Leu	11e	He	Arg	Asn	Gly	Asp	Asn	Val	Glu
465					470					475					480
Ala	Pro	Pro	Val	Tyr	Asp	Ser	Tyr	Glu	Val	Glu	Tyr	Leu	Pro	Ile	Glu
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Gly	Leu	Leu	Ser	Ser	Gly	Lys	His	Phe	Phe	Val	Glu	Leu	Ser	Thr	Asp
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Ser	Ser	Gly	Ala	Ala	Ala	Gly	Met	Ala	Leu	Arg	Tyr	Glu	Ala	Phe	Gln
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GI n	Gly	His	Cys	Tyr	Glu	Pro	Phe	Val	Lys	Tyr	Gly	Asn	Phe	Ser	Ser
C	530					535					540				
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				565					570					575	
Pro	His	Asp	Pro	Gln	Trp	Asn	Glu	Thr	Glu	Pro	Ala	Cys	Arg	Ala	Val
			580					585					590		
Cys	Ser	Gly	Glu	He	Thr	Asp	Ser	Ala	Gly	Val	Val	Leu	Ser	Pro	Asn
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Gly	Pro	Gly	Asp	Val	Leu	Thr	Phe	Tyr	Asp	Gly	Asp	Asp	Leu	Thr	Ala
				645					650					655	
Arg	Val	Leu	Gly	Gln	Tyr	Ser	Gl y	Pro	Arg	Ser	His	Phe	Lys	Leu	Phe
			660		,			665					670		
Thr	Ser	Met	Ala	Asp	Val	Thr	lle	Gln	Phe	Gln	Ser	Asp	Pro	Gly	Thr
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Ser	Val	Leu	Gly	Tyr	Gln	Gln	Gly	Phe	Val	lle	His	Phe	Phe	Glu	Val
	690					695					700				
Pro	Arg	Asn	Asp	Thr	Cys	Pro	Glu	Leu	Pro	Glu	lle	Pro	Asn	Gly	Trp
705					710					715					720
Lys	Ser	Pro	Ser	Gln	Pro	Glu	Leu	Val	His	Gly	Thr	Val	Val	Thr	Tyr
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Gln	Cys	Tyr	Pro	Gly	Tyr	Gln	Val	Val	Gly	Ser	Ser	Va]	Leu	Met	Cys
			740					745					750		
Gln	Trp	Asp	Leu	Thr	Trp	Ser	Glu	Asp	Leu	Pro	Ser	Cys	Gln	Arg	Val
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Thr	Ser	Cys	His	Asp	Pro	Gly	Asp	Val	Glu	His	Ser	Arg	Arg	Pro	Tyr
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Pro	Ala	Pro	Ser	Phe	Pro	Trp	Gly	Pro	Pro	Cys	Asn	He	Ser	Val	Thr
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Phe Gly Ala Ala Arg Asn Leu Val Gln Lys Ala Gln Leu Gly Asp Ser
Arg Leu Ser Pro Asp Val Gly His Leu Val Leu Thr Thr Leu Cys Pro
                         55
                                              60
Ala Leu His Ala Leu Val Ala Asp Gly Leu Lys Pro Phe Arg Lys Asp
                     70
                                          75
                                                              80
Leu Ile Thr Gly Gln Arg Arg Ser Ser Pro Trp Ser Val Val Glu Ala
                                     90
                 85
Ser Val Lys Pro Gly Ser Ser Thr Arg Ser Leu Gly Thr Leu Tyr Ser
                                 105
            100
                                                     110
Gln Val Ser Arg Leu Ala Pro Leu Ser Ser Ser Arg Ser Arg Phe His
                            120
Ala Phe lle Leu Gly Leu Leu Asn Thr Lys Gln Leu Glu Leu Trp Phe
                        135
                                             140
Ser Ser Leu Gln Glu Asp Ala Gly Ser Trp Trp Glu Gln Leu Thr Gln
                                                             160
145
                    150
                                         155
Ala Ser Arg Val Tyr Ala Ser Gly Gly Thr Glu Gly Phe Pro Leu Ser
                165
                                     170
Arg Trp Ala Pro Gly Arg His Gly Thr Ala Ala Glu Glu Gly Ala Gln
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                                 185
                                                     190
Glu Arg Pro Leu Pro Thr Asp Glu Met Ala Pro Gly Arg Gly Leu Trp
                                                 205
                            200
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Leu Gly Arg Leu Phe Gly Val Pro Gly Gly Pro Ala Glu Asn Glu Asn

Gly Ala Leu Lys Ser Arg Arg Pro Ser Ser Trp Leu Pro Pro Thr Val

Ser Val Leu Ala Leu Val Lys Arg Gly Ala Pro Pro Glu Met Pro Ser

				245					250					255	
Pro	Gln	Glu	Leu	Glu	Ala	Ser	Ala	Pro	Arg	Met	Val	Gln	Thr	His	Arg
			260					265					270		
Ala	Val	Arg	Ala	Leu	Cys	Asp	His	Thr	Ala	Ala	Arg	Pro	Asp	G1n	Leu
		275					280					285			
Ser	Phe	Arg	Arg	Gly	Glu	Val	Leu	Arg	Val	lle	Thr	Thr	Val	Asp	Glu
	290					295					300				
Asp	Trp	Leu	Arg	Cys	Gly	Arg	Asp	Gly	Met	Glu	Gly	Leu	Val	Pro	Val
305					310					315					320
G1 y	Tyr	Thr	Ser	Leu	Val	Leu									
				325											
)> 32														
	1> 10														
	2> PI														
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			ا ما	Sor	116	Thr	Aen	Gln	Pro	Pro	Lan	Val	Gln	Ala	He
ме t	G1 y	116	Leu	5	110	1111	пар	OIN	10	110	LCu	, (1)	0111	15	110
	Ser	Arø	Asn		Glu	Glu	Val	Arg		Leu	Len	Ser	Gln		Glu
1110	501	8	20		0.0	0.0		25	00.	,,,,,,			30	2,0	
Asn	He	Asn		Leu	Asp	G1n	Glu		Arg	Thr	Pro	Leu	His	Ala	Ala
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Ala	Tyr		Gly	Asp	Va1	Pro		Leu	Gln	Leu	Leu		Met	Ser	Gly
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Ala	Asn	Val	Asn	Ala	Lys	Asp	Thr	Leu	Trp	Leu	Thr	Pro	Leu	His	Arg
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Ala	Ala	Ala	Ser	Arg	Asn	Glu	Lys	Val	Leu	Gly	Leu	Leu	Leu	Ala	His
				85					90					95	
Ser	Ala	Asp	Val	Asn	Ala	Arg	Asp	Lys	Leu	Trp	Gln	Thr	Pro	Leu	His
			100					105					110		
Val	Ala	Ala	Ala	Asn	Arg	Ala	Thr	Lvs	Cys	Ala	Glu	Ala	Leu	Ala	Pro

Leu	Leu	Ser	Ser	Leu	Asn	Val	Ala	Asp	Arg	Ser	Gly	Arg	Ser	Ala	Leu
	130					135					140				
His	His	Ala	Val	His	Ser	Gly	His	Leu	Glu	Thr	Val	Asn	Leu	Leu	Leu
145					150					155					160
Asn	Lys	Gly	Ala	Ser	Leu	Asn	Val	Cys	Asp	Lys	Lys	Glu	Arg	Gln	Pro
				165					170					175	
Leu	His	Trp	Ala	Ala	Phe	Leu	Gly	His	Leu	Glu	Val	Leu	Lys	Leu	Leu
			180					185					190		
Val	Ala	Arg	Gly	Ala	Asp	Leu	Gly	Cys	Lys	Asp	Arg	Lys	Gly	Tyr	Gly
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Leu	Leu	His	Thr	Ala	Ala	Ala	Ser	$\operatorname{Gl} y$	Gln	He	Glu	Val	Val	Lys	Tyr
	210					215					220				
Leu	Leu	Arg	Met	Gly	Ala	Glu	He	Asp	Glu	Pro	Asn	Ala	Phe	Gly	Asn
225					230					235					240
Thr	Ala	Leu	His	lle	Ala	Cys	Tyr	Leu	Gly	G] n	Asp	Ala	Va]	Ala	He
				245					250					255	
Glu	Leu	Val	Asn	Ala	Gly	Ala	Asn	Val	Asn	Gln	Pro	Asn	Asp	Lys	Gly
			260					265					270		
Phe	Thr	Pro	Leu	His	Val	Ala	Ala	Val	Ser	Thr	Asn	Gly	Ala	Leu	Cys
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Leu	Glu	Leu	Leu	Val	Asn	Asn	Gly	Ala	Asp	Val	Asn	Tyr	Gln	Ser	Lys
	290					295					300				
Glu	Gly	Lys	Ser	Pro	Leu	His	Met	Ala	Ala	He	His	G1y	Arg	Phe	Thr
305					310					315					320
Arg	Ser	Gln	He	Leu	lle	Gln	Asn	Gly	Ser	Glu	He	Asp	Cys	Ala	Asp
				325					330					335	
Lys	Phe	Gly	Asn	Thr	Pro	Leu	His	Val	Ala	Ala	Arg	Tyr	Gly	His	Glu
			340					345					350		
Leu	Leu	He	Ser	Thr	Leu	Met	Thr	Asn	Gly	Ala	Asp	Thr	Ala	Arg	Arg
		355					360					365			
Gly	He	His	Asp	Met	Phe	Pro	Leu	His	Leu	Ala	Val	Leu	Phe	Gly	Phe
	370					375					380				
Ser	Asp	Cys	Cys	Arg	Lys	Leu	Leu	Ser	Ser	Gly	Gln	Leu	Tyr	Ser	Де
385					390					395					400
Val	Sor	Sor	Lou	Son	Acn	Chi	Hi o	Val	Lou	San	Ala	C1v	Pho	Acn	116

				405					410					415	
Asn	Thr	Pro	Asp	Asn	Leu	Gly	Arg	Thr	Cys	Leu	His	Ala	Ala	Ala	Ser
			420					425					430		
Gly	Gly	Asn	Val	Glu	Cys	Leu	Asn	Leu	Leu	Leu	Ser	Ser	Gly	Ala	Asp
		435					440					445			
Leu	Arg	Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala
	450					455					460				
Ala	Asn	Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala
465				•	470					475					480
Gly	Val	Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala
				485					490					495	
Ala	Ala	Ser	Asp	Thr	Tyr	Arg	Arg	Ala	Glu	Pro	His	Thr	Pro	Ser	Ser
			500					505					510		
His	Asp	Ala	Glu	Glu	Asp	Glu	Pro	Leu	Lys	Glu	Ser		Arg	Lys	Glu
		515					520					525			
Ala		Phe	Cys	Leu	Glu		Leu	Leu	Asp	Asn		Ala	Asp	Pro	Ser
	530					535					540				
	Arg	Asp	Arg	Gln		Tyr	Thr	Ala	Val		Tyr	Ala	Ala	Ala	
545					550					555		~	-		560
Gly	Asn	Arg	GIn		Leu	GIu	Leu	Leu		Glu	Met	Ser	Phe		Cys
	61		., .	565	C	T)	7.1	D	570	C	D	,		575	. 1
Leu	Glu	Asp		61u	Ser	Inr	11e		vai	Ser	Pro	Leu	His	Leu	Ala
41.	т	Λ	580	112 -	C	C1	A 1 .	585	1	ть	1	Ala	590	Tlan	Lau
мта	lyr		GIY	HIS	Cys	GIU	600	Leu	Lys	Inr	Leu	605	Glu	1111.	Leu
Vol	Acn	595	Acn	Val	Ara	Acn		Lvc	Clv	Ara	Thr		Leu	Pho	Lou
val	610		nsp	vai	AI g		1115		Oly	Mg	620		Leu	1116	Leu
Ala			Ara	Glv	Ser				Val	Glu			Thr	Ala	His
625	1 1 1 1.1	Olu	m s	01,	630		GIU	O, S		635		1,00	• • • • • • • • • • • • • • • • • • • •	7110	640
	Ala	Ser	Ala	Leu		Lvs	Glu	Arø	lvs		lvs	Tro	Thr	Pro	
01,	1110	001	,,,,	645		2,0	010	6	650	8	,	,,,		655	.,,
His	Ala	Ala	Ala		Ser	Glv	His	Thr		Ser	Leu	His	Leu		He
			660					665	12		5 5		670	• ••	- • -
Asp	Ser	Gly		Arg	Ala	Asp	He		Asp	Va]	Met	Asp	Ala	Tyr	6] v
- ,-		675		- 3		- 11	680		- ,-			685		•	•
Gln	Thr		Leu	Met	Leu	Ala		Met	Asn	Glv	His		Asp	Cvs	Val

	690					695					700				
His	Leu	Leu	Leu	Glu	Lys	Gly	Ser	Thr	Ala	Asp	Ala	Ala	Asp	Leu	Arg
705					710					715					720
Gly	Arg	Thr	Ala	Leu	His	Arg	Gly	Ala	Val	Thr	Gly	Cys	Glu	Asp	Cys
				725					730					735	
Leu	Ala	Ala	Leu	Leu	Asp	His	Asp	Ala	Phe	Val	Leu	Cys	Arg	Asp	Phe
			740					745					750		
Lys	Gly	Arg	Thr	Pro	He	His	Leu	Ala	Ser	Ala	Cys	Gly	His	Thr	Ala
		755					760					765			
Val	Leu	Arg	Thr	Leu	Leu	G1n	Ala	Ala	Leu	Ser	Thr	Asp	Pro	Leu	Asp
	770					775					780				
Ala	Gly	Val	Asp	Tyr	Ser	Gly	Tyr	Ser	Pro	Met	His	Trp	Ala	Ser	Tyr
785					790					795					800
Thr	Gly	Arg	Glu	Asp	Cys	Leu	Glu	Leu	Leu	Leu	Glu	His	Ser	Pro	Phe
				805					810					815	
Ser	Tyr	Leu	Glu	Gly	Asn	Pro	Phe		Pro	Leu	His	Cys		Val	lle
			820					825					830		
Asn	Asn		Asp	Ser	Thr	Thr		Met	Leu	Leu	Gly		Leu	Gly	Ala
		835					840					845	_		
Lys		Val	Asn	Ser	Arg		Ala	Lys	Gly	Arg		Pro	Leu	His	Ala
	850	D.I.				855	0	0.1	,		860			61	
	Ala	Phe	Ala	Asp		Val	Ser	61 y	Leu		Met	Leu	Leu	Gln	
865	41.	C1	V - 1	Α	870	T1	Δ	11.2 =	Tl	875	Λ	Tl	A 1 .	1	880
GIN	Ala	GIU	vai			Inr	Asp	HIS		Gly	Arg	mr	ATA	Leu 895	Met
Thm	11a	410	<i>C</i> 1	885		Cln	Thr	Λlο	890	Vo.1	Clu	Dho	Lou	Leu	Tus
1111	MIA	піа	900	изп	Uly	OIII	1111	905	мта	vai	oru	THE	910	Leu	1 y 1
Arg	Glv	lve		Asn	Lou	Thr	Va1		Aen	Glu	Aen	Lve		Thr	Ala
Mg	Oly	915	MIG	пор	LCu	1111	920	LCu	лэр	Old	71.511	925	non	1111	та
Len	His		Ala	Cvs	Ser	lvs		His	Glu	lvs	Cvs		Leu	Met	He
Bea	930	Bea	7110	0,0	501	935	0.1.3	11,1 (3)	0.10	12,15	940		13.0.0		
Leu		Glu	Thr	Gln	Asp		Glv	Leu	He	Asn		Thr	Asn	Ser	Ala
945			••		950		-			955					960
	Gln	Met	Pro	Leu		11e	Ala	Ala	Arg		Gly	Leu	Ala	Ser	
				965					970		-			975	
Val	Gln	Ala	Leu	Leu	Ser	Hie	Glv	Ala	Thr	Val	len	Ala	Val	Asn	Glu

Glu Gly His Thr Pro Ala Leu Ala Cys Ala Pro Asn Lys Asp Val Ala Asp Cys Leu Ala Leu IIe Leu Ser Thr Met Lys Pro Phe Pro Pro Lys Asp Ala Val Ser Pro Phe Ser Phe Ser Leu Leu Lys Asn Cys Ser Ile Ala Ala Ala Lys Thr Val Gly Gly Cys Gly Ala Leu Pro His Gly Ala Ser Cys Pro Tyr Ser Gln Glu Arg Pro Gly Ala Ile Gly Leu Asp Gly Cys Tyr Ser Glu <210> 3261 <211> 124 <212> PRT <213> Homo sapiens <400> 3261 Met His Ser Pro Arg Thr Gln Ile Ile Trp Phe Cys Phe Thr Lys Ser Lys Cys Ser Thr Cys Ile Ser Leu Phe Gln Thr Glu Met Ala Ile Lys His Val Phe Gln Lys Val Phe Ala Gly Glu Lys Met Arg Lys Val Lys Glu Ser Phe Pro Asp Pro Asp Leu Arg Arg Lys Gly Glu Asp Thr Phe Cys Phe Val Ala Tyr Leu Leu Trp Ala Lys Ser Tyr Tyr Cys Leu Arg Glu Val Arg Leu Thr Leu Ala His Pro Trp Gly Ile Ser Cys Ala Cys Gly Gly Glu Thr Asn Gln Val Gly Asn Asn Ser Phe Ser Pro Tyr Leu

Ser Ser Phe His Val Leu Leu Trp Asn Lys Ser Asp

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Pro Ser Ser Trp Asp Tyr Arg His Val Pro Pro Pro His Pro Ala Asn 50 55 60

Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Asp Gln Ala Gly 65 70 75 80

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Gln Lys Ser Gln

115

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105

Phe Leu Lys Leu Gln Ala Glu Thr Glu Arg Leu Glu Gly Trp Cys 120 Cys Gln Met Asp Lys Glu Thr Lys Glu Asn Asn Leu Ser Glu Glu Val 130 140 135 Leu Gly Lys Val Leu Ser Ala Val Gly Ser Ala Gln Leu Leu Met Ser 160 150 155 Gln Lys Phe Gln Gln Phe Arg Gly Leu Cys Glu Gln Asn Leu Asn Pro 165 170 Asp Ala Asn Pro Arg Pro Thr Ala Gln Asp Leu Ala Gly Phe Trp Asp 185 190 180 Leu Leu Gln Leu Ser Ile Glu Asp Ile Ser Met Lys Phe Asp Glu Leu 200 Tyr His Leu Lys Ala Asn Ser Trp Gln Leu Val Glu Thr Pro Glu Lys 210 215 220 Arg Lys Val Ser Met Glu Gln Cys Gly Gly Glu Val Gln Gly Gln Ile 230 235 225 240 Pro Gly Arg Gln

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Cys Leu Tyr Asn Asn lle Val Ile Glu Thr Leu Leu Gln Pro lle His
35 40 45

Asn Leu Met Lys Gly Asn Glu Ala Ser Pro Asn Cys Ser Glu Thr Ala 50 55 60

Leu lle His Ile Ala Gly Ile Leu Val Arg Ile Ala Ser Val Glu Glu 65 70 75 80

Gly	Leu	He	Leu	Leu	Leu	Tyr	Gly	Ala	Asn	Met	Asn	Ser	Ser	Glu	Glu
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Ser	Pro	Thr	Gly	Ala	His	He	lle	Ala	Gln	Phe	Ser	Lys	Lys	Leu	Leu
			100					105					110		
Лsр	Glu	Asp	Пе	Ser	lle	Phe	Ser	Gly	Ser	Glu	Met	Leu	Pro	Val	Val
		115					120					125			
Lys	Gly	Ala	Phe	lle	Ser	Val	Cys	Arg	His	11e	Tyr	Ser	Thr	Cys	Glu
	130					135					140				
Gly	Leu	Gln	Val	Leu	Ile	Thr	Tyr	Asn	Leu	His	Glu	Ser	Ile	Ala	Lys
145					150					155					160
Ala	Trp	Lys	Lys	Thr	Ser	Leu	Leu	Ser	Glu	Arg	He	Pro	Thr	Pro	Va1
				165					170					175	
Glu	Gly	Ser	Asp	Ser	Val	Ser	Ser	Val	Ser	Gln	Glu	Ser	Gln	Asn	Ile
			180					185					190		
Met	Ala	Trp	Glu	Asp	Asn	Leu	Leu	Asp	Asp	Leu	Leu	His	Phe	Ala	Ala
		195					200					205			
Thr	Pro	Lys	Gly	Leu	Leu	Leu	Leu	Gln	Arg	Thr	Gly	Ala	Ile	Asn	Glu
	210					215					220				
Cys	Val	Thr	Phe	lle	Phe	Asn	Arg	Tyr	Ala	Lys	Lys	Leu	Gln	Val	Ser
225					230					235					240
Arg	His	Lys	Lys	Phe	Gly	Tyr	Gly	Val	Leu	Val	Thr	Arg	Val	Ala	Ser
				245					250					255	
Thr	Ala	Ala	Gly	Gly	lle	Ala	Leu	Lys	Lys	Ser	Gly	Phe	lle	Asn	Glu
			260					265					270		
Leu	lle	Thr	Glu	Leu	Trp	Ser	Asn	Leu	Glu	Tyr	Gly	Arg	Asp	Asp	Val
		275					280					285			
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lle	Tyr	Glu	Leu	Val	Arg	Asn	Gln	Asp	Leu	Pro	Asn	Lys	Thr	Glu	Tyr
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Ser	Leu	Arg	Glu	Val	Pro	Thr	Cys	Val	He	Asp	He	lle	Asp	Arg	Leu
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G1n	Ser	His	He	Phe	Gly	Leu	Arg	Leu	Leu	Ser	Val	lle	Cys	Cys	Asp
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Leu	Asp	Thr	Leu	Leu	Leu	Leu	Glu	Ala	G1n	Tyr	Gln	Val	Ser	Glu	Met
385					390					395					400
Leu	Leu	Asn	Ala	Gln	Glu	Glu	Asn	He	Leu	Glu	He	Ser	Glu	Ser	His
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Arg	Asp	Phe	He	He	Asp	Gly	Leu	Ser	Val	Glu	Arg	Asn	His	Val	Leu
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Arg	Leu	Leu	Glu	Lys	Ser	Asp	Asn	Pro	Tyr	Pro	Trp	Pro	Met	Phe	Ser
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Ser	Tyr	Pro	Leu	Pro	Asn	Cys	Tyr	Leu	Ser	Asp	He	Thr	Arg	Asn	Ala
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Gly	lle	Lys	Gln	Asp	Asn	Asp	Leu	Asp	Lys	Leu	Leu	Leu	Cys	Leu	Lys
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He	Ser	Asp	Lys	Gln	Thr	Glu	Trp		Glu	Asn	Cys	Gln	Arg	Gln	Phe
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Cys	Lys		Met	Lys	Ala	Lys		Asp	Ile	He	Ser		Glu	Ala	Leu
		515					520					525		_	
He		Leu	Leu	Glu	Lys	Phe	Val	Leu	His	Leu		Glu	Ser	Pro	Ser
	530	_			_	535	~ 1				540				
	Cys	Tyr	Phe	Pro		Val	Glu	Tyr	Thr		Thr	Asp	Ala	Asn	
545		61	6	,	550	0	., .	<i>(</i>) 1	61	555	61	7.3	•		560
Lys	Asn	Glu	Ser		Ser	Ser	Val	GIn		Leu	Gly	11e	Lys		lhr
17 1		T	61	565	DI.		C		570			61	۸.1	575	
Val	Arg	lyr		Lys	Phe	Leu	Ser		Leu	Lys	Asp	GIy		Glu	Asn
	1	т!	580	V 1	1 .	1 .	11.7	585	C1	Δ	DI	1	590	C1	C1
Asp	Leu		ırp	vai	Leu	Lys		Cys	GIU	Arg	Pne		Lys	GIN	GIN
Cl.	Tha	595 San	110	1	Com	Com	600	Lou	Cua	Lou	C1n	605	Aan	Tun	A 1 o
GIII	610	261	116	Lys	261	Ser 615	Leu	Leu	Cys	Leu	620	Oly	ASII	1 9 1	піа
Clv		Acn	Tro	Pho	Vol.	Ser	Sor	Lou	Pho	Mot		Mot	Lou	Gly	Acn
625	1115	nsh	пр	1116	630	261	261	Leu	1116	635	, 1 C	me t	ren	01 y	640
	Glo	lve	The	Pho		Phe	الما	Hic	Gla		Ser	Ara	ىنم ا	leu	
Lys	Oiu	Буо	1113	645	0.111	1116	Leu	1113	650	1 110	561	5	Lou	655	1 1
				0 10					000					000	

Ser Ala Phe Leu Trp Leu Pro Arg Leu His Ile Ser Ser Tyr Leu Pro 660 665 Asn Asp Thr Val Glu Ser Gly Ile His Pro Val Tyr Phe Cys Ser Thr 675 680 685 His Tyr lle Glu Met Leu Leu Lys Ala Glu Leu Pro Leu Val Phe Ser 700 695 Ala Phe His Met Ser Gly Phe Ala Pro Ser Gln Ile Cys Leu Gln Trp 710 715 Ile Thr Gln Cys Phe Trp Asn Tyr Leu Asp Trp Ile Glu Ile Cys His 725 730 Tyr Ile Ala Thr Cys Val Phe Leu Gly Pro Asp Tyr Gln Val Tyr Ile 745 Cys lle Ala Val Phe Lys His Leu Gln Gln Asp Ile Leu Gln His Thr 760 765 Gln Ala Gln Asp Leu Gln Val Phe Leu Lys Glu Glu Ala Leu His Gly 775 780 Phe Arg Val Ser Asp Tyr Phe Glu Tyr Met Glu Ile Leu Glu Gln Asn 790 795 Tyr Arg Thr Val Leu Leu Arg Asp Met Arg Asn Ile Arg Leu Gln Ser 805 810 815 Thr

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 20
 25
 30

 Val Arg Asn Leu Lys Tyr 11e Gly Asp Val Gly 11e Leu Ser Leu Thr
 35
 40
 45

Ala His Cys Thr Gly Gln Glu Ser Thr Val Phe Gln Leu Glu Phe Arg 50 Thr Pro Gly Phe Glu Val Glu Asp Asp His Cys Ser Thr Trp Phe Gly 65 70 75 Ile Ala Thr Gly Val Ala Lys Pro Lys Glu Gly Tyr Ile Arg Lys Gly 85 90 Gly Val Arg Arg Gln Asn Lys Glu Lys Glu Glu Trp Val Phe Tyr Leu 105 110 Phe Ser Phe Ile Asn 115 <210> 3267 <211> 147 <212> PRT <213> Homo sapiens <400> 3267 Met Phe Arg Phe His Thr Lys Lys Glu His Thr Phe Thr Ile Phe Ser 1 5 10 15 Gly Gly Cys Leu Leu His Trp Gln Ala Gly Thr Glu Phe Phe Leu 25 His Asp Lys Ser Gly Gly Leu Leu Val Arg Glu Pro Met Gly 11e Phe 45 40 Ser Trp Lys Glu Tyr Ser Ser Ile Pro Ser Pro Asn Pro Thr Val Ile

140

135

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Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys Asn Cys Leu Val Asp Lys His Ile Ala Phe Ile Gly Asp Ser Arg Ile Arg Gln Leu Phe Tyr Ser Phe Val Lys Ile Ile Asn Pro Gln Phe Lys Glu Glu Gly Asn Lys His Glu Asn Ile Pro Phe Glu Asp Lys Thr Ala Ser Val Lys Val Asp Phe Leu Trp His Pro Glu Val Asn Gly Ser Met Lys Gln Cys Ile Lys Val Trp Thr Glu Asp Ser Ile Ala Lys Pro His Val 11e Val Ala Gly Ala Ala Thr Trp Ser 11e Lys 11e His Asn Gly Ser Ser Glu Ala Leu Ser Gln Tyr Lys Met Asn lle Thr Ser lle Ala Pro Leu Leu Glu Lys Leu Ala Lys Thr Ser Asp Val Tyr Trp Val Leu

Asp	Pro	Val	Tyr	Glu	Asp	Leu	Leu	Ser	Glu	Asn	Arg	Lys	Met	Ile
210					215					220				
Asn	Glu	Lys	11e	Asp	Ala	Tyr	Asn	Glu	Ala	Ala	Val	Ser	He	Leu
				230					235					240
Ser	Ser	Thr	Arg	Asn	Ser	Lys	Ser	Asn	Val	Lys	Met	Phe	Ser	Val
			245					250					255	
Lys	Leu	He	Ala	Gln	Glu	Thr	lle	Met	Glu	Ser	Leu	Asp	G1 y	Leu
		260					265					270		
Leu	Pro	Glu	Ser	Ser	Arg	Glu	Thr	Thr	Ala	Met	He	Leu	Met	Asn
	275					280					285			
Tyr	Cys	Asn	Lys	Ile	Leu	Lys	Pro	Val	Asp	Gly	Ser	Cys	Cys	Gln
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Arg	Pro	Pro	Val	Thr	Leu	He	Gln	Lys	Leu	Ala	Ala	Cys	Phe	Phe
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Leu	Ser	He	He	Gly	Tyr	Leu	He	Phe	Tyr	He	He	His	Arg	Asn
			325					330					335	
His	Arg		Asn	Lys	Pro	Cys		Asp	Leu	Glu	Ser		Glu	Glu
Lys		lle	He	Asn	Thr		Val	Ser	Ser	Leu		He	Leu	Leu
							~ 1							
	Phe	Cys	Lys	Leu		Leu	He	Met	Ala		Phe	Tyr	Met	Cys
				131			0.1				T	TO L		C
Arg	Ala	Asn	Leu		Met	Lys	61u	Asn		Phe	lyr	Ihr	HIS	
D1	DI.	11	D		11.	т	71.	1		1	C1	V - 1	DI	400
rne	Pne	116		116	116	lyr	116		vai	Leu	GIŸ	vai		Tyr
C1	Aan	The		Cl.,	Tha	Luc	Vol		Aan	Ana	C111	Cln		Aan
010	ASH		177.2	010	1111	Lys		Leu	ASII	MI g	Olu		1111	лър
Tun	Lve		Trn	Mot	Cln	Lou		Πο	ىم ا	110	Tyr		110	Sar
пр		Oly	Пр	Met	1110		101	116	Leu	116		1113	116	561
Ala		Thr	Pho	Len	Pro		Tyr	Met	His	He		Val	Len	Val
	501		1110	Lea		, (1)	.,,	me c	1113		8	• • • • • • • • • • • • • • • • • • • •	Bea	, (1)
	Tyr	Leu	Phe	Gln		Glv	Tyr	Glv	His		Ser	Tyr	Phe	Trn
1110	. 3.*	.5.0				~ y	- 7 -	~.,				- , -		480
Lvs	Glv	Asp	Phe]]e	Tvr	Arg	Val		G]n	Val	Leu	Phe	
	- +					- , -	. 3		, ,				495	- 0
	210 Asn Ser Lys Leu Tyr 290 Arg Leu His Ser 370 Arg Phe Glu Trp Ala 450 Ala	210 Asn Glu Ser Ser Lys Leu Leu Pro 275 Tyr Cys 290 Arg Pro Leu Ser His Arg Lys Asn 355 Ser Phe 370 Arg Ala Phe Phe Glu Asn Trp Lys 435 Ala Ser 450 Ala Tyr	210 Asn Glu Lys Ser Ser Thr Lys Leu Ile 260 Leu Pro Glu 275 Tyr Cys Asn 290 Arg Pro Pro Leu Ser Ile His Arg Lys 340 Lys Asn Ile 355 Ser Phe Cys 370 Arg Ala Asn Phe Phe Ile Glu Asn Thr 420 Trp Lys Gly 435 Ala Ser Thr 450 Ala Tyr Leu	210 Asn Glu Lys 11e Ser Ser Thr Arg 245 Lys Leu I1e Ala 260 Leu Pro Glu Ser 275 Tyr Cys Asn Lys 290 Arg Pro Pro Val Leu Ser 11e 11e 325 His Arg Lys Asn 340 Lys Asn 11e 11e 355 Ser Phe Cys Lys 370 Arg Ala Asn Leu Phe Phe I1e Pro 405 Glu Asn Thr Lys 420 Trp Lys Gly Trp 435 Ala Ser Thr Phe 450 Ala Tyr Leu Phe	210 Asn Glu Lys 11e Asp 230 Ser Ser Thr Arg Asn 245 Lys Leu Ala Glu Lys Leu Bro 260 Lys Ser Leu Pro Glu Ser Ser 275 Lys Lys Ile 290 Lys Asn Ile Arg Pro Val Thr 310 Asn Lys Asn Leu Ser Ile Asn Lys Asn Asn Lys Lys Asn Asn Lys Leu 370 Lys Leu Ann Arg Ala Asn Lys Leu Arg Ala Asn Leu Phe Arg Ala Asn Lys Leu Arg Ala Asn Lys Glu Arg Ala Asn Lys Glu A	210 215 Asn Glu Lys 11e Asp Ala Ser Ser Thr Arg Asn Ser Lys Leu 11e Ala Glu Glu Lys Leu 260	210 Use of the part	19	210 Use of the content of the conte	215 Asn Glu Lys 11e Asp Ala Tyr Asn Glu Ala Ser Ser Lys 11e Asp Asp Lys Lys Asp Val Ser Ser Ala Asp Lys Lys Asp Val Lys Leu 11e Ala Asp Glu Thr Asp Leu Pro Glu Ser Ser Arg Glu Thr Ala 275 Tyr Tyr Bull Lys Bull Thr Ala Asp 290 Tyr Tyr Lys Bull Lys Asp Asp 297 Tyr Tyr Lys Pro Val Asp Arg Pro Pro Leu Lys Lys Lys Lys Lys Asp Lys Lys Asp Leu Asp </td <td>210 </td> <td>210 Image: color of the /td> <td> 11</td> <td>Alta Alta <th< td=""></th<></td>	210	210 Image: color of the	11	Alta Alta <th< td=""></th<>

Leu	Asn	Phe	Leu	Val	Val	Val	Leu	Cys	lle	Val	Met	Asp	Arg	Pro	Tyr
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Gln	Phe	Tyr	Tyr	Phe	Val	Pro	Leu	Val	Thr	Val	Trp	Phe	Met	Val	lle
		515					520		•			525			
Tyr	Val	Thr	Leu	Ala	Leu	Trp	Pro	Gln	He	He	Gln	Lys	Lys	Ala	Asn
	530					535					540				
Gly	Asn	Cys	Phe	Trp	His	Phe	Gly	Leu	Leu	Leu	Lys	Leu	Gly	Phe	Leu
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Leu	Leu	Phe	lle	Cys	Phe	Leu	Ala	Tyr	Ser	Gln	Gly	Ala	Phe	Glu	Lys
				565					570					575	
Ile	Phe	Ser	Leu	Trp	Pro	Leu	Ser	Lys	Cys	Phe	Glu	Leu	Lys	G1 y	Asn
			580					585					590		
Val	Tyr	Glu	Trp	Trp	Phe	Arg	Trp	Arg	Leu	Asp	Arg	Tyr	Val	Val	Phe
		595					600					605			
His	Gly	Met	Leu	Phe	Ala	Phe	He	Tyr	Leu	Ala	Leu	Gln	Lys	Arg	Gln
	610					615					620				
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625					630					635					640
Asn	Phe	Leu	Leu	Phe	lle	Ser	Val	Val	Ser	Phe	Leu	Thr	Tyr	Ser	lle
				645					650					655	
Trp	Ala	Ser	Ser	Cys	Lys	Asn	Lys	Ala	Glu	Cys	Asn	Glu	Leu	His	Pro
			660					665					670		
Ser	Val	Ser	Val	Val	Gln	He	Leu	Ala	Phe	lle	Leu	lle	Arg	Asn	He
		675					680					685			
Pro	Gly	Tyr	Ala	Arg	Ser	Val	Tyr	Ser	Ser	Phe	Phe	Ala	Trp	Phe	Gly
	690					695					700				
Lys	He	Ser	Leu	Glu	Leu	Phe	He	Cys	Gln	Tyr	His	11e	Trp	Leu	Ala
705					710					715					720
Ala	Asp	Thr	Arg	G1y	11e	Leu	Val	Leu	Пе	Pro	Gly	Asn	Pro	Met	Leu
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Asn	He	Пe	Val	Ser	Thr	Phe	Пе	Phe	Val	Cys	Va]	Ala	His	Glu	11e
			740					745					750		
Ser	Gln	He	Thr	Asn	Asp	Leu	Ala	Gln	Пе	He	Пe	Pro	Lys	Asp	Asn
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Ser	Ser	Leu	Leu	Lys	Arg	Leu	Ala	Cys	Пе	Ala	Ala	Phe	Phe	Cys	Gly

Ser Tyr Ala Glu Arg Lys Leu Asp Ser Asp Val Tyr Pro Ser Ser Lys
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55
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Gln Glu Asp Gly Phe Pro Met Gln Glu Leu Gln Val Leu Gln Pro Gln

65 70 75 80

Ala Ser Leu Glu Ser Ser Thr Gln Arg Leu Ser Asp Gly Glu Ile Asn 85 90 95

Ala Gln Glu Ser Thr Tyr Lys Val Ser Lys Ala Asp Asp Arg Tyr Ser 100 105 110

Gln Ser Val Ile Arg Ser Asn Ser Arg Leu Glu Asp Gln Val Ile Gly
115 120 125

Val Ala Leu Gln Ala Ser Lys Lys Glu Glu Ser Val Val Gly Ser Val
130 135 140

Thr Gln Leu Asn Gln Gln He Gly Gln Val Asn Asn Ala Ala Thr Leu 145 150 155 160

Asp Leu Lys Asn Ser Thr Asn Leu IIe Gln Thr Pro Gln IIe Arg Leu 165 170 175

Asn Thr Lys Asp Leu Lys Gln Gln His Pro Leu lle Leu Lys Val His 180 185 190

Glu Ser Lys Val Gln Glu Gln His Asp Gln He lle Asn Ala Ser Ser

		195					200					205			
G1n	He	Gln	He	Pro	Asn	His	Ala	Leu	Gly	His	Gly	His	Gln	Ala	Ser
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Leu	Pro	Asn	Thr	Gln	Val	Leu	Leu	Asp	Ser	Ala	Cys	Asp	Leu	Gln	He
225					230					235					240
Leu	Gln	Gln	Ser	Ile	Leu	Gln	Ala	Gly	Leu	G1 y	Gln	Val	Lys	Ala	Ser
				245					250					255	
Leu	Gln	Ala	Gln	Arg	Val	Gln	Ser	Pro	Gln	Gln	He	Val	His	Pro	Phe
			260					265					270		
Leu	Gln	Met	Glu	Gly	His	Val	Ile	Gln	Ser	Asn	Gly	Asp	His	Ser	Gln
		275					280					285			
Gln	Gln	Leu	His	Pro	Gln	Asn	Ser	Glu	Val	Met	Lys	Met	Asp	Leu	Ser
	290					295					300				
Glu	Ser	Ser	Lys	Pro	Leu	Gln	Gln	His	Leu	Thr	Thr	Lys	Gly	His	Phe
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Ser	Glu	Thr	Asn	Gln	His	Asp	Ser	Lys	Asn	Gln	Phe	Val	Ser	Leu	Gly
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Ser	Met	Cys	Phe	Pro	Glu	Ala	Val	Leu	Leu	Ser	Asp	Glu	Arg	Asn	Ile
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Leu	Ser	Asn	Val	Asp	Asp	He	Leu	Ala	Ala	Thr	Ala	Ala	Ala	Cys	Gly
		355					360					365			
Val	Thr	Pro	Thr	Asp	Phe	Ser	Lys	Ser	Thr	Ser	Asn	Glu	Thr	Met	Gln
	370					375					380				
Ala	Val	Glu	Asp	Gly	Asp	Ser	Lys	Ser	His	Phe	G1n	Gln	Ser	Leu	Asp
385					390					395					400
Val	Arg	His	Val	Thr	Ser	Asp	Phe	Asn	Ser	Met	Thr	Ala	Thr	Val	Gly
				405					410					415	
Lys	Pro	Gln	Asn	lle	Asn	Asp	Thr	Ser	Leu	Asn	Gly	Asn	Gln	Val	Thr
			420					425					430		
Val	Asn	Leu	Ser	Pro	Val	Pro	Ala	Leu	Gln	Ser	Lys	Met	Thr	Leu	Asp
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Gln		His	He	Glu	Thr		Gly	Gln	Asn	Пе		Thr	Lys	Val	Thr
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	Ala	Val	Val	Gly		Ser	His	Glu	Val		Glu	Gln	Ser	Ser	Gly
465					470					475					480
Pro	Phe	Lys	Lys	Gln	Ser	Ala	Thr	Asn	Leu	G1u	Ser	Glu	Glu	Asp	Ser

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Glu	Ala	Pro	Val	Asp	Ser	Thr	Leu	Asn	Asn	Asn	Arg	Asn	Gln	Glu	Phe
			500					505					510		
Val	Ser	Ser	Ser	Arg	Ser	He	Ser	Gly	Glu	Ser	Ala	Thr	Ser	Glu	Ser
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Arg	Ser	Ala	Leu	Ala	Leu	Leu	Ala	Met	Ala	Gln	Ser	Gly	Asp	Ala	Val
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Ser	Val	Lys	He	Glu	Glu	Glu	Asn	Gln	Asp	Leu	Met	His	Phe	Asn	Leu
				565					570					575	
Gln	Lys	Lys	Gly	Ala	Lys	Gly	Lys	Gly	Gln	Val	Lys	Glu	Glu	Asp	Asn
			580					585					590		
Ser	Asn	Gln	Lys	Gln	Leu	Lys	Arg	Pro	Ala	Gln	Gly	Lys	Arg	Gln	Asn
		595					600					605			
Pro	Arg	Gly	Thr	Asp	He	Tyr	Leu	Pro	Tyr	Thr	Pro	Pro	Ser	Ser	Glu
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Ser	Cys	His	Asp	Gly	Tyr	Gln	His	Gln	Glu	Lys	Met	Arg	Gln	Lys	lle
625					630					635					640
Lys	Glu	Val	Glu	Glu	Lys	Gln	Pro	Glu	Val	Lys	Thr	Gly	Phe	He	Ala
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Leu	Ala	Val	Arg	Met	Pro	Asn	Arg	Thr	Arg	Arg	Pro	Gly	Thr	Gln	Met
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Val	Arg	Thr	Phe	Cys	Pro	Pro	P.ro	Leu	Pro	Lys	Pro	Ser	Ser	Thr	Thr
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Val	Asp	Asn	Glu	Leu	Lys	Asn	Leu	Glu	His	Leu	Ser	Ser	Phe	Ser	Ser
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Asp	Glu	Asp	Asp	Pro	Gly	Tyr	Ser	Gln	Asp	Ala	Tyr	Lys	Ser	Val	Pro
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Thr Thr Met Arg Tyr His Leu Met Pro Val Arg Met Val Ile lle Lys
                             40
Lys Ser Lys Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Val Gly Thr
     50
                                              60
                         55
Leu Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln Pro Leu Trp Lys
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                                          75
Cys Val Trp Leu Phe Leu Lys Asp Leu Glu Leu Glu Ile Leu Phe Val
                                     90
                 85
Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Glu Tyr Lys Pro Phe
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Tyr Tyr Lys Asp Thr Cys Thr Phe Leu Phe Ile Ala Ala Leu Phe Thr
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                                                 125
lle Ala Lys Thr Gln
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                                      10
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Ser Ser Ser Ile Arg Leu Glu Lys Thr Arg Phe Pro Ser Gly Leu Gly

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Ala lle His His Asn Lys lle Ser lle Val Gly Thr Gly Ser Val Gly
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Val Ala Cys Ala IIe Ser IIe Leu Leu Lys Gly Leu Ser Asp Glu Leu 35 40 45

Val Leu Val Asp Val Asp Glu Gly Lys Leu Lys Gly Glu Thr Met Asp
50 55 60

Leu Gln His Gly Ser Pro Phe Met Lys Met Pro Asn Ile Val Ser Ser 65 70 75 80

Lys Asp Tyr Leu Val Thr Ala Asn Ser Asn Leu Val lle lle Thr Ala 85 90 95

Gly Ala Arg Gln Lys Lys Gly Glu Thr Arg Leu Asp Leu Val Gln Arg 100 105 110

Asn Val Ser Ile Phe Lys Leu Met Ile Pro Asn Ile Thr Gln Tyr Ser 115 120 125

Pro His Cys Lys Leu Leu Ile Val Thr Asn Pro Val Asp Ile Leu Thr

	130					135					140				
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Ser	Gly	Cys	Asn	Leu	Asp	Ser	Ala	Arg	Phe	Arg	Tyr	Phe	He	Gly	Gln
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Arg	Leu	Gly	He	His	Ser	Glu	Ser	Cys	His	Gly	Leu	He	Leu	Gly	Glu
			180					185					190		
His	Gly	Asp	Ser	Ser	Val	Pro	Val	Trp	Ser	Gly	Val	Asn	He	Ala	Gly
		195					200					205			
Val	Pro	Leu	Lys	Asp	Leu	Asn	Pro	Asp	Ile	G1 y	Thr	Asp	Lys	Asp	Pro
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Glu	Gln	Trp	Glu	Asn	Val	His	Lys	Lys	Val	He	Ser	Ser	Gly	Tyr	Glu
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Met	Val	Lys	Met	Lys	Gly	Tyr	Thr	Ser	Trp	Gly	He	Ser	Leu	Ser	Val
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Ala	Asp	Leu	Thr	Glu	Ser	11e	Leu	Lys	Asn	Leu	Arg	Arg	Val	His	Pro
			260					265					270		
Val	Ser	Thr	Leu	Ser	Lys	Gly	Leu	Tyr	Gly	Ile	Asn	Glu	Asp	Ile	Phe
		275					280					285			
Leu	Ser	Val	Pro	Cys	lle	Leu	Gly	Glu	Asn	Gly	He	Thr	Asp	Leu	lle
	290					295					300				
Lys	Val	Lys	Leu	Thr	Leu	Glu	Glu	Glu	Ala	Cys	Leu	Gln	Lys	Ser	Ala
305					310					315					320
Glu	Thr	Leu	Trp	Glu	lle	Gln	Lys	Glu	Leu	Lys	Leu				
				325					330						

<210> 3273

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3273

Met 11e Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg

1 5 10 15

Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Ala Ala Asp

			20					25					30		
Ser	Lys	Asp	Glu	Glu	Val	Lys	Val	Ala	Pro	Arg	Arg	Ser	Phe	Leu	Asp
		35					40					45			
Phe	Asp	Pro	His	His	Phe	Trp	Gln	Trp	Ser	Ser	Phe	Ser	Asp	Tyr	Val
	50					55					60				
Gln	Cys	Val	Leu	Ala	Phe	Thr	Gly	Val	Ala	Gly	Tyr	He	Thr	Tyr	Leu
65					70					75					80
Ser	He	Asp	Ser	Ala	Leu	Phe	Val	Glu	Thr	Leu	Gly	Phe	Leu	Ala	Val
				85					90					95	
Leu	Thr	Glu	Ala	Met	Leu	Gly	Val	Pro	Gln	Leu	Tyr	Arg	Asn	His	Arg
			100					105					110		
His	Gln	Ser	Thr	Glu	Gly	Met	Ser	lle	Lys	Met	Val	Leu	Met	Trp	Thr
		115					120					125			
Ser	Gly	Asp	Ala	Phe	Lys	Thr	Ala	Tyr	Phe	Leu	Leu	Lys	Gly	Ala	Pro
	130					135					140				
Leu	Gln	Phe	Ser	Val	Cys	Gly	Leu	Leu	Gln	Val	Leu	Val	Asp	Leu	Ala
145					150					155					160
Ile	Leu	Gly	Gln	Ala	Tyr	Ala	Phe	Ala	Arg	His	Pro	Gln	Lys	Pro	Ala
				165					170					175	
Pro	His	Ala	Val	His	Pro	Thr	Gly	Thr	Lys	Ala	Leu				
			180					185							

<210> 3274

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3274

Met Phe Phe Phe Phe Val Glu Met Gly Phe Tyr His Val Gly Gln Ala Gly 1 5 5 5 5 5 10 10 15 15 15 Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser 20 25 30 Ala Gly Ala Gly 35 45 45 Phe Thr Asn Phe Leu Pro Thr Ala Gly Ala Thr Phe Tyr Ser Lys Glu

<210> 3275

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3275

Met Glu Leu Ala lle Trp Tyr Val Gln Gln Pro Ser Leu Arg Ile Ala 1 5 10 15

Lys Cys Ile Gly Asn Ile Phe Gln Ala Val Thr Pro Val Thr Ser Lys
20 25 30

Gln Arg Ser Cys Leu Cys Leu Leu Ala Leu Ala Tyr Ala Lys Gly Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Phe Asn Asn Phe Gly Phe Gln Leu Phe Thr Leu Trp Phe Gln Leu Arg 50 55 60

Leu Gly Arg Asn Trp Pro Gln Asp Lys Val Thr Pro Glu Phe Gly Thr
65 70 75 80

Lys Pro Gly Ala Lys Asp Ser Asp Gln Thr Ser Trp Ala Ser Gly Ser

85 90 95

Ala Pro Arg Gly Leu Lys Pro Thr Arg Val Arg Phe Gly lle Cys Arg 100 105 110

Val

<210> 3276

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3276 Met Ala Pro Ala Ser Val Pro Ser Ser Leu Gln Gly Gly Leu Gly Ala 5 10 Cys Leu Gly Arg Lys Glu Arg Arg Cys Arg Ser Ala Trp Gly Gly Cys 25 Ser Arg Arg Trp Pro Gln Ala Gln Ala Pro Gln Gly Leu Phe Pro Pro 35 40 45 Ala Arg Pro Gly Arg Ala Ala Trp Trp Arg Val Arg Glu Asp Pro Gly 55 Gly Gly Pro Ser Cys Lys Asn Trp Trp Gly Pro Arg Ser Pro Pro Ser 70 75 Arg Gly Gly Leu Leu Pro Phe Gly Cys Cys Val Gln Ser Pro Val 90 Ser Cys Ser Leu Arg Leu Tyr Pro Ala Ala Phe Pro Pro Ala Gly Glu 105 Ala Arg Ala Ala Leu Cys Trp Pro Val Leu Pro Leu Pro Thr Arg Val 115 120 125 Pro Trp Trp Ser Cys Arg Gly Ala His Val Thr Ser Leu Pro Thr Gly 135 Val Arg Ala Gly Pro Gln Pro Glu Arg Glu Arg Pro Gln Ala Cys Ala 150 155 Gly Gly Gly Asn Gly Gln Leu Arg Val Val Val Pro Gly Ala Leu His 165 170 Ser Arg Gly Arg Gly Cys Val Arg Gly Val Arg Gly Ile Val Cys Pro 180 185 190 Ala Ala Gly Thr Gln

<210> 3277

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3277 Met Ala Thr Val Gly Glu Arg Arg Pro Leu Pro Ser Pro Glu Val Met 5 Leu Gly Gln Ser Trp Asn Leu Trp Val Glu Ala Ser Lys Leu Pro Gly 20 Lys Asp Gly Thr Glu Leu Asp Glu Ser Phe Lys Glu Phe Gly Lys Asn 40 Arg Glu Val Met Gly Leu Cys Arg Glu Asp Met Pro Ile Phe Gly Phe 55 60 Cys Pro Ala His Asp Asp Phe Tyr Leu Val Val Cys Asn Asp Cys Asn 70 75 Gln Val Val Lys Pro Gln Ala Phe Gln Ser His Tyr Glu Arg Arg His 85 90 Ser Ser Ser Ser Lys Pro Pro Leu Ala Val Pro Pro Thr Ser Val Phe 100 105 110 Ser Phe Phe Pro Ser Leu Ser Lys Ser Lys Gly Gly Ser Ala Ser Gly 120 Ser Asn Arg Ser Ser Ser Gly Gly Val Leu Ser Ala Ser Ser Ser Ser 130 135 140 Ser Lys Leu Leu Lys His Pro Leu Thr Lys Asn Tyr Ser

<210> 3278

145

<211> 408

<212> PRT

<213> Homo sapiens

150

<400> 3278

 Met Asn Leu Pro Arg Ala Glu Arg Pro Arg Ser Thr Pro Gln Arg Ser

 1
 5
 10
 15

 Leu Arg Asp Ser Asp Gly Glu Asp Gly Lys Ile Asp Val Leu Gly Glu 25
 30

 Glu Glu Asp Glu Asp Glu Val Glu Asp Glu Glu Glu Glu Glu Glu Ala Ser Gln 35
 40
 45

 Lys Phe Leu Glu Glu Gln Ser Leu Gln Pro Gly Leu Gln Val Ala Arg Trp

	50					55					60				
Gly	Gly	Val	Ala	Leu	Pro	Arg	Glu	His	Ile	Glu	Gly	Gly	Gly	Pro	Ser
65					70					75					80
Asp	Pro	Ser	Glu	Phe	Gly	Thr	Glu	Phe	Arg	Ala	Pro	Pro	Arg	Ser	Ala
				85					90					95	
Ala	Ala	Ser	Glu	Asp	Ala	Arg	Gln	Pro	Ala	Lys	Pro	Pro	Tyr	Ser	Tyr
			100					105					110		
Ile	Ala	Leu	lle	Thr	Met	Ala	He	Leu	Gln	Ser	Pro	His	Lys	Arg	Leu
		115					120					125			
Thr	Leu	Ser	Gly	Ile	Cys	Ala	Phe	Ile	Ser	Gly	Arg	Phe	Pro	Tyr	Tyr
	130					135					140				
Arg	Arg	Lys	Phe	Pro	Ala	Trp	Gln	Asn	Ser	He	Arg	His	Asn	Leu	Ser
145					150					155					160
Leu	Asn	Asp	Cys	Phe	Va]	Lys	He	Pro	Arg	Glu	Pro	Gly	His	Pro	Gly
				165					170					175	
Lys	Gly	Thr	Tyr	Trp	Ser	Leu	Asp	Pro	Ala	Ser	Gln	Asp	Met	Phe	Asp
			180					185					190		
Asn	Gly		Phe	Leu	Arg	Arg		Lys	Arg	Phe	Lys		His	Gln	Leu
		195				_	200					205			
Thr			Ala	His	Leu		His	Pro	Phe	Pro		Pro	Ala	Ala	His
	210				Б	215		61	Б.		220	0.1		15	. 1
	Ala	Leu	His	Asn		Arg	Pro	Gly	Pro		Leu	Gly	Ala	Pro	
225	n.	CI	D	17 1	230 D	C1	A 1 .	т	D	235	TI.	4.1	D	C1	240
Leu	Pro	GIN	Pro		rro	GIY	Ala	lyr		Asn	Inr	Ala	Pro	Gly	Arg
Ara	Dno	Tun	Alo	245	Lou	Uic	Dno	u; o	250 Pro	Dno	A 15 cr	Tun	Lou	255 Leu	Lou
лıg	110	1 y 1	260	Leu	Leu	1115	110	265	110	110	ΛI g	1 9 1	270	Leu	Leu
Sor	Ala	Pro		Tyr	Ala	Glv	Ala		lve	Lve	Ala	Glu		Ala	Aen
301	Mia	275	Mid	1) 1	MIG	013	280	110	Lys	123.3	ATG	285	Oly	MIG	пэр
Leu	Ala		Pro	G1 v	Thr	Leu		Val	Leu	Gln	Pro		Leu	Gly	Pro
,,,,,	290	• • • • • • • • • • • • • • • • • • • •		0. ,		295			2500	· · · ·	300	00.	20.0	01)	
Gln		Trp	Glu	Glu	Glv		Glv	Leu	Ala	Ser		Pro	Glv	Gly	Glv
305		,			310	, ,	•			315	-		- 3	- 2	320
	lle	Ser	Phe	Ser	lle	Glu	Ser	Ile	Met		Gly	Va1	Arg	Gly	
				325					330		-		_	335	

<210> 3279

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3279

130

Met Gly Asp Leu Leu Pro Arg Ala Trp Pro Gly Ala Gly Cys Thr Glu 1 Thr Gln Thr Thr Ser Gln Gly Pro Gln Glu Leu Ala Val Pro Thr Ala 25 Glu Cys Tyr Ser Cys Ser Phe Tyr Phe Cys Val Cys Pro Glu Ala Leu 35 40 45 Pro Gln Glu Glu Glu Gly Ser Gly Ser Glu Glu Arg Gly Glu Glu 50 55 60 Lys Gly Thr Ser Ser Pro Asp Tyr Arg His Tyr Leu Arg Met Trp Ala 75 Lys Glu Lys Glu Ala Gln Lys Glu Thr Ile Lys Asp Leu Pro Lys Met 95 90 Asn Gln Glu Gln Phe Ile Glu Leu Cys Lys Thr Leu Tyr Asn Met Phe 105 Ser Glu Asp Pro Met Glu Gln Asp Leu Tyr His Ala 11e Ala Thr Val 115 120 125

Ala Ser Leu Leu Leu Arg Ile Gly Glu Val Gly Lys Lys Phe Ser Ala

140

Arg Thr Gly Arg Lys Pro Arg Asp Cys Ala Thr Gly Glu Asp Glu Pro Pro Ala Pro Glu Leu His Gln Asp Ala Ala Arg Glu Leu Gln Pro Pro Ala Ala Gly Asp Pro Gln Ala Lys Ala Gly Gly Asp Thr His Leu Gly Thr Ala Pro Gln Glu Ser Gln Val Val Val Glu Gly Gly Ser Gly Glu Gly Gln Gly Ser Pro Ser Gln Leu Leu Ser Asp Asp Glu Thr Lys Asp Asp Met Ser Met Ser Ser Tyr Ser Val Val Ser Thr Gly Ser Leu Gln Cys Glu Asp Leu Ala Asp Asp Thr Val Leu Val Gly Gly Glu Ala Cys Ser Ser Thr Ala Arg lle Gly Gly Thr Val Asp Thr Asp Trp Cys lle Ser Phe Glu Gln Ile Leu Ala Ser Ile Leu Thr Glu Ser Val Leu Val Asn Phe Phe Glu Lys Arg Val Asp Ile Gly Leu Lys Ile Lys Asp Gln Lys Lys Val Glu Arg Gln Phe Ser Thr Ala Ser Asp His Glu Gln Pro Gly Val Ser Gly

<210> 3280

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3280

Met Phe His Arg Thr Pro Pro Arg Arg Ser Phe Pro Asn Pro Ser Trp

1 5 10 15

Lys Gly Pro Gly Ser Lys Gly His Gln Ser Cys Leu Ser Asp Gln Leu
20 25 30

Ala Val Ser Ser Gly Cys Trp Pro Glu Thr Ala Leu Ala Leu Ser Lys 40 Val Thr Val His Cys Leu Ala Ile Ala Ser Leu Ser Gly Pro Ala Leu 50 55 Gly Leu Val Arg Leu Leu Gln His Pro Trp Leu Phe Pro Trp Gln Cys 70 Asp Tyr Pro Ala Leu Thr Gln Ser Lys Gly Val Pro Leu Ser Trp Val 90 Lys Phe Thr Arg Arg Leu Leu Lys Cys Leu Leu Arg Gly Asn Leu Cys Leu Ser 120 Leu Ser Leu Ser Leu Ser Gln Cys 11e Ser Leu Leu Ser Phe Thr Phe 130 135 140 Pro Phe Phe Leu Ser Lys Asn Asn Val Leu Val Glu Ala Leu Val Thr 150 155 Leu Ile Asn Gln Asn Leu Pro Phe Pro Val Ser Leu Phe Leu Arg Pro 165 170 Phe His Pro His Tyr Leu Leu Leu Pro Arg Asn Met Thr Asp His Gln 190 180 185 Asp Ala Ala Arg Arg Glu Asp Leu Ser Gln Lys Pro Thr Ser Lys Met 200 205 Gly Gly Arg Cys Gly Leu Arg Ser Ser Ala Met His Pro Lys Pro Leu 210 215 220 Thr Phe Pro Leu Trp Lys Cys Thr Gly 225 230

<210> 3281

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3281

Met Ala Ala Val Glu Lys Arg Arg Gln Ala Val Pro Pro Pro Ala Gly
1 5 10 15

Phe Thr Asp Ser Gly Arg Gln Ser Val Ser Arg Ala Ala Gly Ala Ala 20 25 Glu Ser Glu Glu Asp Phe Leu Arg Gln Val Gly Val Thr Glu Met Leu 35 40 45 Arg Ala Ala Leu Leu Lys Val Leu Glu Ala Arg Pro Glu Glu Pro Ile 55 60 Ala Phe Leu Ala His Tyr Phe Glu Asn Met Gly Leu Arg Ser Pro Val 70 75 80 Asn Gly Gly Ala Gly Glu Pro Pro Gly Gln Leu Leu Gln Gln Gln 85 90 Arg Leu Gly Arg Ala Leu Trp His Leu Arg Leu Ala His His Ser Arg 105 Arg Cys Ala Val Gly Arg Leu Gly Arg Val Gly Gln Arg Trp Thr Ser 115 120 125 Thr Pro Ser Met Pro Arg Ala Ala Pro Tyr Pro Gln Arg Arg Arg 130 135 140 Gly Pro Gly Leu Ala Gly Ser Cys Ser Ala Arg Cys Leu Leu Gly Trp 150 155 160 Asp Gly Ser Asp Lys Val Gly Trp Arg Val Arg Ala Sér Val Arg Arg 165 170 175

<210> 3282

<211> 924

<212> PRT

<213> Homo sapiens

<400> 3282

Met Ile Ser Gln Thr Gln Ser Leu Gly Gly Pro Pro Leu Glu His Glu
1 5 10 15

Val Pro Gly His Pro Pro Gly Gly Asp Met Gly Gln Gln Met Asn Met
20 25 30

Met 11e Gln Arg Leu Gly Gln Asp Ser Leu Thr Pro Glu Gln Val Ala 35 40 45

Trp Arg Lys Leu Gln Glu Glu Tyr Tyr Glu Glu Lys Arg Arg Lys Glu

	50					55					60				
G] u	Gln	He	Gly	Leu	His	Gly	Ser	Arg	Pro	Leu	Gln	Asp	Met	Met	Gly
65					70					75					80
Met	Gly	Gly	Met	Met	Val	Arg	Gly	Pro	Pro	Pro	Pro	Tyr	His	Ser	Lys
				85					90					95	
Pro	Gly	Asp	Gln	Trp	Pro	Pro	Gly	Met	Gly	Ala	Gln	Leu	Arg	Gly	Pro
			100					105					110		
Met	Asp	Val	Gln	Asp	Pro	Met	Gln	Leu	Arg	Gly	Gly	Pro	Pro	Phe	Pro
		115					120					125			
Gly	Pro	Arg	Phe	Pro	Gly	Asn	Gln	Пе	Gln	Arg	Val	Pro	Gly	Phe	Gly
	130					135					140				
Gly	Met	Gln	Ser	Met	Pro	Met	Glu	Val	Pro	Met	Asn	Ala	Met	Gln	Arg
145					150					155					160
Pro	Val	Arg	Pro	Gly	Met	Gly	Trp	Thr	Glu	Asp	Leu	Pro	Pro	Met	Gly
				165					170					175	
G1 y	Pro	Ser	Asn	Phe	Ala	Gln	Asn	Thr	Met	Pro	Tyr	Pro	Gly	Gly	G1n
			180					185					190		
Gly	Glu		Glu	Arg	Phe	Met		Pro	Arg	Val	Arg		Glu	Leu	Leu
		195					200	_				205		_	
Arg		Gln	Leu	Leu	Glu		Arg	Ser	Met	Gly		Gln	Arg	Pro	Leu
	210			_		215		~ •			220				
	Met	Ala	Gly	Ser		Met	Gly	GIn	Ser		Glu	Met	Glu	Arg	
225	0.1				230			Б	4.1	235	131	15	61	0.1	240
Met	GIn	Ala	His		GIn	Met	Asp	Pro		Met	Phe	Pro	Gly		Met
۸1.	C1	C1	C1	245	1	A 1 -	C1	Tl	250 D	М., 4	C1	Ma	C1	255	C1
АТа	61 y	GIY	260	GIŸ	Leu	АТа	GIY		rro	мет	GIY	мет	Glu 270	rne	GIŅ
C1v	Clu	Λκα		Lou	Lou	Cor	Dro	265 Pma	Mot	Clu	Cln	Sor	Gly	Lou	Ara
GIŸ	GIŅ	275	Oly	Leu	Leu	261	280	110	met	Gry	OJII	285	Uly	Leu	AI g
Glu	Val		Pro	Pro	Mot	Glv		Glv	Aen	Lau	Aen		Asn	Viot	Asn
Olu	290	дър	110	110	MC C	295	110	GTy	изп	Leu	300	.110 (поп	are c	изп
Val		Met	Asn	Met	Asn		Asn	Len	Asn	Val		Met	Thr	Pro	Gln
305	71.511	inc c	non	,,,,,,,,	310	,4C C	11011	1,00	711.711	315	0111	,,,,,,		110	320
	Gln	Met	Leu	Met		Gln	Lvs	Met	Arø		Pro	Glv	Asp	Len	
1	~ 311			325		O.1.11	2,0		330	- - J				335	
Glv	Pro	Gln	G1 v		Ser	Pro	Glu	Glu		Ala	Arg	Val	Arg		Gln

			340					345					350		
Asn	Ser	Ser	Gly	Val	Met	Gly	Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser
		355					360					365			
Gln	Phe	Pro	Asn	Gln	Gly	Gln	Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro
	370					375					380				
Tyr	Gln	Ala	Met	Ser	Gln	Asp	Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser
385					390	•				395					400
Pro	Asp	G1n	Ser	Ser	Met	Pro	Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu
				405					410					415	
Ser	His	Met	Pro	Leu	Pro	Pro	Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His
			420					425					430		
Ser	Ala	Pro	Asn	Arg	Gly	Leu	Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	He
		435					440					445			
Ser	Пе	Asn	Gln	Met	Gly	Ser	Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro
	450					455					460				
Thr	Leu	Ser	Gln	Val	His	Ser	Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn
465					470					475					480
Leu	Lys	Ser	Pro	Gln	Thr	Pro	Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala
				485					490					495	
Asn	Pro	Pro	Gly	Pro	Leu	Lys	Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu
			500					505					510		
Ser	Val	Arg	Ser	Pro	Thr	Gly	Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser
		515					520					525			
Met	Ala	Val	Pro	Ser	Pro	Gly	Trp	Val	Ala	Ser	Pro	Lys	Thr	Ala	Met
	530					535		-			540				
Pro	Ser	Pro	Gly	Val	Ser	Gln	Asn	Lys	Gln	Pro	Pro	Leu	Asn	Met	Asn
545					550					555					560
Ser	Ser	Thr	Thr	Leu	Ser	Asn	Met	Glu	Gln	Gly	Thr	Leu	Pro	Pro	Ser
				565					570					575	
Gly	Pro	Arg	Ser	Ser	Ser	Ser	Ala	Pro	Pro	Ala	Asn	Pro	Pro	Ser	Gly
			580					585					590		
Leu	Met	Asn	Pro	Ser	Leu	Pro	Phe	Thr	Ser	Ser	Pro	Asp	Pro	Thr	Pro
		595					600					605			
Ser	Gln	Asn	Pro	Leu	Ser	Leu	Met	Met	Thr	Gln	Met	Ser	Lys	Tyr	Ala
	610					615					620				

Met	Pro	Ser	Ser	Thr	Pro	Leu	Tyr	His	Asn	Ala	He	Lys	Thr	He	Ala
625					630					635					640
Thr	Ser	Asp	Asp	Glu	Leu	Leu	Pro	Asp	Arg	Pro	Leu	Leu	Pro	Pro	Pro
				645					650					655	
Pro	Pro	Pro	Gln	Gly	Ser	Gly	Pro	Gly	He	Ser	Asn	Ser	Gln	Pro	Ser
			660					665					670		
Gln	Met	His	Leu	Asn	Ser	Ala	Ala	Ala	Gln	Ser	Pro	Met	Gly	Met	Asn
		675					680					685			
Leu	Pro	Gly	Gln	Gln	Pro	Leu	Ser	His	Glu	Pro	Pro	Pro	Ala	Met	Leu
	690					695					700				
Pro	Ser	Pro	Thr	Pro	Leu	Gly	Ser	Asn	He	Pro	Leu	His	Pro	Asn	Ala
705					710					715					720
Gln	Gly	Thr	Gly	Gly	Pro	Pro	Gln	Asn	Ser	Met	Met	Met	Ala	Pro	Gly
				725					730					735	
Gly	Pro	Asp	Ser	Leu	Asn	Ala	Pro	Cys	Gly	Pro	Val	Pro	Ser	Ser	Ser
			740					745					750		
Gln	Met	Met	Pro	Phe	Pro	Pro	Arg	Leu	Gln	Gln	Pro	His	Gly	Ala	Met
		755					760					765			
Ala	Pro	Thr	Gly	Gly	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Gln	Gln	His	Tyr
	770					775					780				
Pro	Ser	Gly	Met	Ala	Leu	Pro	Pro	Glu	Asp	Leu	Pro	Asn	Gln	Pro	Pro
785					790					795					800
Gly	Pro	Met	Pro	Pro	Gln	G1n	His	Leu	Met	Gly	Lys	Ala	Met	Ala	Gly
				805					810					815	
Arg	Met	Gly	Asp	Ala	Tyr	Pro	Pro	G1 y	Val	Leu	Pro	Gly	Val	Ala	Ser
			820					825					830		
Val	Leu	Asn	Asp	Pro	Glu	Leu	Ser	Glu	Va]	He	Arg	Pro	Thr	Pro	Thr
		835					840					845			
Gly	He	Pro	Glu	Phe	Asp	Leu	Ser	Arg	lle	He	Pro	Ser	Trp	Phe	Leu
	850					855					860				
Arg	Thr	Arg	Pro	Phe	Ser	Phe	Cys	Leu	Tyr	Leu	Leu	Arg	He	Leu	Ser
865					870					875					880
Leu	Leu	Met	Trp	Leu	Thr	Pro	Leu	Pro	Pro	Leu	Pro	Ala	Gly	Gly	Trp
				885					890					895	
Pro	Gly	Gly	Gln	Val	Pro	Ala	Gly	Ala	Val	Asn	Arg	Ala	Leu	Arg	Phe
			900					905					910		

Cys Ala Gly Leu Cys Val Cys Cys Ile Ser Val Phe

<210> 3283

<211> 428

<212> PRT

<213> Homo sapiens

⟨400⟩ 3283

Met Ser Ser Gly Leu Arg Ala Ala Asp Phe Pro Arg Trp Lys Arg His lle Ser Glu Gln Leu Arg Arg Arg Asp Arg Leu Gln Arg Gln Ala Phe Glu Glu Ile Ile Leu Gln Tyr Asn Lys Leu Leu Glu Lys Ser Asp Leu His Ser Val Leu Ala Gln Lys Leu Gln Ala Glu Lys His Asp Val Pro

Asn Arg His Glu Ile Arg Arg Arg Gln Ala Arg Leu Gln Lys Glu Leu

Ala Glu Ala Ala Lys Glu Pro Leu Pro Val Glu Gln Asp Asp Asp 1le

Glu Val Ile Val Asp Glu Thr Ser Asp His Thr Glu Glu Thr Ser Pro

Val Arg Ala lle Ser Arg Ala Ala Thr Lys Arg Leu Ser Gln Pro Ala

Gly Gly Leu Leu Asp Ser Ile Thr Asn Ile Phe Gly Arg Arg Ser Val

Ser Ser Phe Pro Val Pro Gln Asp Asn Val Asp Thr His Pro Gly Ser

Gly Lys Glu Val Arg Val Pro Ala Thr Ala Leu Cys Val Phe Asp Ala

His Asp Gly Glu Val Asn Ala Val Gln Phe Ser Pro Gly Ile Thr Ser

Ile Glu Phe Asp Ser Ala Gly Ser Tyr Leu Leu Ala Ala Ser Asn Asp

Phe	Ala	Ser	Arg	He	Trp	Thr	Val	Asp	Asp	Tyr	Arg	Leu	Arg	His	Thr
	210					215					220				
Leu	Thr	Gly	His	Ser	Gly	Lys	Val	Leu	Ser	Ala	Lys	Phe	Leu	Leu	Asp
225					230					235					240
Asn	Ala	Arg	lle	Val	Ser	Gly	Ser	His	Asp	Arg	Thr	Leu	Lys	Leu	Trp
				245					250					255	
Asp	Leu	Arg	Ser	Lys	Val	Cys	He	Lys	Thr	Val	Phe	Ala	Gly	Ser	Ser
			260					265					270		
Cys	Asn	Asp	Ile	Val	Cys	Thr	Glu	Gln	Cys	Val	Met	Ser	Gly	His	Phe
		275					280					285			
Asp	Lys	Lys	Ile	Arg	Phe	Trp	Asp	Ile	Arg	Ser	Glu	Ser	He	Val	Arg
	290					295					300				
Glu	Met	Glu	Leu	Leu	Gly	Lys	He	Thr	Ala	Leu	Asp	Leu	Asn	Pro	Glu
305					310					315					320
Arg	Thr	Glu	Leu	Leu	Ser	Cys	Ser	Arg	Asp	Asp	Leu	Leu	Lys	Val	He
				325					330					335	
Asp	Leu	Arg	Thr	Asn	Ala	Ile	Lys	Gln	Thr	Phe	Ser	Ala	Pro	Gly	Phe
			340			•		345					350		
Lys	Cys	Gly	Ser	Asp	Trp	Thr	Arg	Val	Val	Phe	Ser	Pro	Asp	Gly	Ser
		355					360					365			
Tyr	Val	Ala	Ala	Gly	Ser	Ala	Glu	Gly	Ser	Leu	Tyr	He	Trp	Ser	Val
	370					375					380				
Leu	Thr	Gly	Lys	Val	Glu	Lys	Val	Leu	Ser	Lys	Gln	His	Ser	Ser	Ser
385					390					395					400
lle	Asn	Ala	Val	Ala	Trp	Ser	Pro	Ser	Gly	Ser	His	Val	Val	Ser	Val
				405					410					415	
Asp	Lys	Gly	Cys	Lys	Ala	Val	Leu	Trp	Ala	Gln	Tyr				
			420					425							

<210> 3284

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3284

Met Arg Met Val Pro Met Glu Met Phe Asn Tyr Cys Ser Gln Leu Glu 1 10 Asp Glu Asn Ser Ser Ala Gly Leu Asp Ile Pro Gly Pro Pro Cys Thr 20 Lys Ala Ser Pro Glu Pro Ala Lys Pro Lys Pro Gly Ala Gln His Ser Leu Pro Thr Glu Ala Glu Ala Pro Ala Gly Glu Arg Glu Ala Ser His 55 Gly His Gly Asp His Cys Arg Gly Arg Val Arg Arg Arg Leu His His 65 70 75 80 Asp Gly Gly Gly Arg Cys Leu Trp Leu His Leu Arg Leu Pro His Gly 90 Gln Val Pro Pro Gly Ala Gln Lys Ala Pro Ala Pro Asp Gly Gly Pro 100 105 110 Arg Gly Arg Ala Arg Gly Pro Glu Ala Asp Leu Phe Cys Gly Leu Ser 115 120 125 Ala His Pro His Pro Ala Arg 130

<210> 3285

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3285

 Met Glu His Phe Gly Ser Gly Leu Met Gly Glu Ser Pro Phe Ile Phe

 1
 5
 10
 15

 Leu His Leu Gly Gln Leu His Ser Lys Glu Arg Asn Lys Gly His Val
 20
 25
 30

 Leu Pro Lys Ala Ser Gly Leu Thr Gly Gln Ser Gln Pro Phe Arg Glu
 35
 40
 45

 Gly Met Ser Pro Lys Glu Gly Ser Pro Phe Phe Pro Glu His Pro Pro
 50
 55
 60

Leu Ser Ala Glu Leu Leu Leu Pro Thr His Pro Ser Thr 11e Ala Leu 65 70 75 80

Ser Thr Val Cys Pro Cys Gln Asn Pro Ser Pro Thr Cys Leu Ala Trp 85 90 95

Tyr Pro Ser Leu Gly Gly Arg Gln
100

⟨210⟩ 3286

<211> 140

<212> PRT

<213> Homo sapiens

⟨400⟩ 3286

Met Leu Gly Ile Ser Ala lle Gly Gly Leu Cys Cys Leu His Arg Leu 1 5 10 15

Tyr Ser Cys lle Pro Gly Glu Gly Gly Arg Ala Ala Lys Glu Lys Ser 20 25 30

Gln Ser Gln Gln Pro Ala Leu Arg Pro Ser Lys Leu Cys Thr Gly Gly
35 40 45

Leu Gly Ser Ala Leu Trp Ala Arg Gly Ala Gly Lys Arg Ala Gly Arg 50 55 60

Gly Thr Ala Ala Thr Ser Ala Arg Ala Ala Gln Glu Ala Pro Pro Tyr
65 70 75 80

Thr Ala Leu Gln Val Pro Gln Arg Glu Gln Pro Met Leu Pro Lys His
85 90 95

Pro Leu His Thr His Gln Gly Ser Trp Arg Arg Glu Val Pro Gln Gly 100 105 110

Lys Ala Pro Ser Pro Arg Arg Ala Ser Gly Pro Gly Leu Leu Trp Leu 115 120 125

Pro Thr Ala Ile Ile Ser Ile Tyr Arg Ala Gln Ser 130 135 140

<210> 3287

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3287 Met Ser Leu Leu Pro Asn Ser His Gln Ile Phe Leu Ile Glu Phe Leu 5 10 15 Val Leu Val Pro Asp Arg Thr Asn Asp Ser Pro Asn Leu Pro Val Phe 25 20 Met Arg Glu Lys Glu Lys Gly Ile Lys Gly Gly Arg Lys Lys Pro 40 45 Asn Ser Val Tyr Gly Glu Lys Gly Phe Cys Phe Ser Pro Asn Leu Gly 50 55 60 Gly Gly Arg Gly Gly Phe Ser Phe Tyr Phe Cys Phe Cys Phe Tyr Leu 70 75 Gly Phe Cys Phe Ser His Val Tyr Ser Ala Arg Ser Val Glu Gly Gly 90 Leu Gly Glu Gly Glu Leu Glu Lys Glu Leu Met Gly Ser Tyr Pro Gly 100 105 110 Leu <210> 3288 <211> 209 <212> PRT <213> Homo sapiens <400> 3288

Met Lys Gly Gly Ala Gly Gly Ala Arg Pro Pro Pro Gly Arg Pro Val 10 Arg Ser Gly Ala Asn Ala Ile Pro Gly Pro Thr Ala Arg Gly Arg Cys 20 25 Gly Pro Pro Asn Pro Pro Pro Arg Pro Gly Trp Gly Gly Gly Ala Gly 40 Gly Asp Gln Arg Leu Val Ser Leu Arg Ser Asp Leu Arg Gln Arg Gly 50 60 55 Arg Asp lle Met Thr Val Gly Ala Arg Leu Arg Ser Lys Ala Glu Ser 65 70 75 80 Ser Leu Leu Arg Arg Gly Pro Arg Gly Arg Gly Arg Thr Glu Gly Asp Glu Glu Ala Ala Ala Ile Leu Glu His Leu Glu Tyr Ala Asp Glu Ala Glu Ala Ala Ala Glu Ser Gly Thr Ser Ala Ala Asp Glu Arg Gly Pro Gly Thr Arg Gly Ala Arg Arg Val His Phe Ala Leu Leu Pro Glu Arg Tyr Glu Pro Leu Glu Glu Pro Ala Pro Ser Glu Gln Pro Arg Lys Arg Tyr Arg Arg Lys Leu Lys Lys Tyr Gly Lys Asn Val Gly Lys Val Ile lle Lys Gly Cys Arg Tyr Val Val Ile Gly Leu Gln Gly Phe Ala Ala Ala Tyr Ser Ala Pro Phe Ala Val Ala Thr Ser Val Val Ser Phe Val Arg

<210> 3289

<211> 107

<212> PRT

<213> Homo sapiens

⟨400⟩ 3289

Arg Thr Phe Asn Arg Phe Lys Lys Asn Val Leu Asp Trp Val Pro Lys 85 90 95

Lys Gln Ser Leu Lys Gln Gly Phe Val Cys Lys 100 105

<210> 3290

<211> 357-

<212> PRT

<213> Homo sapiens

<400> 3290

Met Leu Gln Gln Ile Leu His Asp Met Tyr Ile Asp Pro Glu Leu Leu 1 5 10 15

Ala Glu Leu Ser Asp Val Gln Lys His Ile Leu Phe Tyr Lys Met Arg 20 25 30

Glu Glu Gln Leu Arg Arg Trp Lys Glu Arg Glu Thr Trp Glu Ala Leu
35 40 45

Ala Gln Asp Glu Gly Leu Arg Pro Pro Lys Thr Lys Arg Ala Ala Ser 50 55 60

Asp Lys His Ile Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val
65 70 75 80

Trp lle Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu lle Ser 85 90 95

Glu Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala 100 105 110

Glu Glu Leu Trp Arg Gln Lys Glu Ala Glu Ile Thr Lys Lys Phe Arg
115 120 125

Asp Ala Leu Ala Asn Glu Lys Ala Arg Ile Leu Ala Glu Lys Trp Lys 130 135 140

Val Glu Met Glu Gly Arg Lys Ala Ala Lys Val Leu Glu Glu Arg Ile 145 150 155 160

His Glu Glu Phe Lys Arg Lys Glu Glu Glu Glu Arg Lys Arg Gly Glu
165 170 175

Glu Arg 11e Arg Leu Gln Glu Gln Arg Ala Lys Glu Leu Tyr Trp 180 185 190 Thr Leu Lys Gln Ala Gln Leu His Cys Gln Ala Ser Glu Lys Glu Glu Arg Glu Trp Glu Glu Gln Leu Arg Arg Ser Lys Ala Ala Asp Glu Glu Arg Ser Arg Arg Ala Gln Arg Ala Arg Asp Glu Tyr Arg His His Ser Leu Arg Ala Ile Gln Lys Gly Thr Val Ala Gly Leu Ser Ser Met Phe Arg Glu Leu Gly Gln Ser His Glu Gln Glu Ala Arg Leu Tyr His His Leu Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Arg Thr Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg Leu Pro Ser Val Val

<210> 3291

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3291

Phe Leu Met Ser Pro Asn Ala Ser Thr Trp Ile Phe Gln Leu Lys Met 55 Leu Tyr Ser Leu Ala Ser Phe Val Pro Leu Cys Pro Phe Gly Ala Ser 65 70 75 80 Leu Leu Glu Phe Ala Gly Gly Pro Leu Leu Thr Leu Phe Ala Trp Val 90 Ser Pro Ala Glu Ala Ala Lys Gln Gln Arg Leu Leu Pro Val Leu Ser 105 110 Ser Arg Ser Phe Asp Pro Val Gly His Leu Ser Asp Ala Ser Gln Ser 115 120 125 Ser Pro Val Ser Gly Val Cys Arg Ser Lys Leu Glu Gly Ile Ser Gln 135 140 Ser Val Tyr Met Gly Ile Arg Asp Pro Leu Glu Glu Ala Asp 145 150 155

<210> 3292

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3292

Met Glu Met Ile Ala Phe Ala Arg Ile Phe Cys Lys Gly Gln Val Ser I 5 10 15

Thr Ala Thr Phe Leu Glu Ser Cys Gly Val Ala Asp Leu Ile Thr Thr
20 25 30

Cys Tyr Gly Gly Arg Asn Arg Arg Val Ala Glu Ala Phe Ala Arg Thr 35 40 45

Gly Lys Thr lle Glu Glu Leu Glu Lys Glu Met Leu Asn Gly Gln Lys 50 55 60

Leu Gln Gly Pro Gln Thr Ser Ala Glu Val Tyr Arg lle Leu Lys Gln
65 70 75 80

Lys Gly Leu Leu Asp Lys Phe Pro Leu Phe Thr Ala Val Tyr Gln Ile 85 90 95

Cys Tyr Glu Ser Arg Pro Val Gln Glu Met Leu Ser Cys Leu Gln Ser 100 105 110 His Pro Glu His Thr 115

<210> 3293

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3293

Met Trp Ser Lys Gly Trp Ile Val Ile Ser Lys Glu Ile His Cys Leu

1 5 10 15

The His Phe Lys Lys Gly Leu Thr Ser Gln Leu His Gly Met Arg Ser 20 25 30

Ala Ala Ser Asn Cys Gln Leu Eeu Gln Ser Leu Leu Gln Leu Gln Lys 35 40 45

Asp Thr Val Leu Glu Val Ile Pro Phe Pro Cys Leu Val Thr Glu Val
50 55 60

Gln Leu Asn Val Ala Ala Lys Val Thr Leu Met Pro Met Gly Ser Lys 65 70 75 80

Lys Ser Lys Ser Leu Asn Arg Ile Leu Arg Asn Pro Lys Ser Val Phe 85 90 95

Phe Gln His Met Thr Phe Trp Ser Ser Leu Leu Phe Ser Asn Arg 100 105 110

<210> 3294

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3294

Met Gly Cys Ser Pro Leu Ala Cys Ser Ser Thr Pro Leu His Pro Ser

1 5 10 15

Leu Ser Phe Gly Arg Ser Ala Ile Gln Ser Cys His Leu Phe Arg Met

20 25 30

<210> 3295

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3295

Met Val Tyr Ser Arg His Pro Lys Pro Val Ser Thr Ser His Lys Arg 5 10 15 His Val Ser His Arg Ala Gly Asn Pro Gly Pro Ser Pro Gly Thr Ser 25 Gly Pro 11e Ser Ala Pro Asp Leu Pro Cys Ser Leu Ala Trp Asp Leu 35 45 40 Ser Tyr Ser Trp Ala Val Asp His Val Pro Leu Pro Ala Leu Thr Cys 55 Pro Leu Thr Gly Asp Ser Glu Gly Pro His Leu Pro Arg Cys His Ser 70 75 Thr Trp His Leu Met Arg Lys Ala Thr Gln Arg Lys Gly Leu Tyr Ser 85 90 95 Ser Asp Pho Arg Gly Lys Thr Thr Gln Met Lys Gly Thr Thr Ile

105

110

<210> 3296

100

<211> 144

45

125

140

80

75

<212> PRT <213> Homo sapiens <400> 3296 Met Gly Val Ala Arg Met Gly Ser His Gly Ser Val Arg Ala Glu Ala Arg Phe Glu Leu Arg Pro Thr Pro Arg His Ser Ala Cys Tyr Pro Gly 25 Cys Pro Pro Pro Gly Cys His His His Ala Arg Gly Ala Ala Ser Pro 35 40 Gly Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Gly Thr 55 Glu Ser His Arg Leu Arg Phe Gln Arg Arg Asn Leu Val Ser Glu Asn 65 70 Pro Ala Leu Arg Arg Ala Gly Ala Glu Arg Ser Arg His Trp Pro Glu 85 Gly Gly Leu Ser Thr Tyr Lys Pro Thr Glu Ala Ser Val Ser Val Val 105 Leu Phe Val Val Ser Gln Ala Leu Gly Ser Trp Leu Gly Val Arg Val 115 120

<210> 3297 <211> 319 <212> PRT <213> Homo sapiens

<400> 3297

130

Met Thr Leu Ala Ser His Pro Arg Pro Glu Gly Leu His Ser Arg Gln 10 Trp Ser Gly Ser Gln Asp Ser Gln Met Gly Phe Pro Arg Ala Asp Pro 20 30 Ala Ser Asp Arg Ala Ser Leu Phe Val Ala Arg Thr Arg Arg Ser Asn 35 40 45

Arg Ser Ser Thr Cys Lys Gln Gly Cys Leu Pro Leu Ser Thr Leu Ala

Ser	Ser	Glu	Ala	Leu	Leu	Val	Asp	Arg	Ala	Ala	Gly	Gly	Gly	Ala	Gly
	50					55					60				
Ser	Pro	Pro	Ala	Pro	Leu	Ala	Pro	Ser	Ala	Ser	Gly	P.ro	Pro	Val	Cys
65					70					75					80
Lys	Ser	Ser	Glu	Val	Leu	Tyr	Glu	Arg	Pro	Gln	Pro	Thr	Pro	Ala	Phe
				85			*		90					95	
Ser	Ser	Arg	Thr	Ala	Gly	Pro	Pro	Asp	Pro	Pro	Arg	Ala	Ala	Arg	Pro
			100					105					110		
Ser	Ser	Ala	Ala	Pro	Ala	Ser	Arg	Gly	Ala	Pro	Arg	Leu	Pro	Pro	Val
		115				•	120					125			
Cys	Gly	Asp	Phe	Leu	Leu	Asp	Tyr	Ser	Leu	Asp	Arg	Gly	Leu	Pro	Arg
	130					135					140				
Ser	Gly	Gly	Gly	Thr	Gly	Trp	Gly	Glu	Leu	Pro	Pro	Ala	Ala	Glu	Val
145					150					155					160
Pro	Gly	Pro	Leu	Ser	Arg	Arg	Asp	G1 y	Leu	Leu	Thr	Met	Leu	Pro	Gly
				165					170					175	
Pro	Pro	Pro	Val	Tyr	Ala	Ala	Asp	Ser	Asn	Ser	Pro	Leu	Leu	Arg	Thr
			180					185					190		
	Asp	Pro	180				Thr		Thr		Pro	Cys		Leu	Pro
	Asp	Pro 195	180				Thr 200		Thr		Pro	Cys 205		Leu	Pro
Lys	Asp Glu	195	180 His	Thr	Arg	Ala	200	Arg		Lys		205	Gly		
Lys		195	180 His	Thr	Arg	Ala	200	Arg		Lys		205	Gly		
Lys Pro	Glu	195 Ala	180 His Ala	Thr Glu	Arg Gly	Ala Pro 215	200 Glu	Arg Val	His	Lys Pro	Asn 220	205 Pro	Gly Leu	Leu	Trp
Lys Pro	Glu 210	195 Ala	180 His Ala	Thr Glu	Arg Gly	Ala Pro 215	200 Glu	Arg Val	His	Lys Pro	Asn 220	205 Pro	Gly Leu	Leu	Trp
Lys Pro Met 225	Glu 210	195 Ala Pro	180 His Ala Pro	Thr Glu Thr	Arg Gly Arg 230	Ala Pro 215 Ile	200 Glu Pro	Arg Val Ser	His Ala	Lys Pro Gly 235	Asn 220 Glu	205 Pro Arg	Gly Leu Ser	Leu Gly	Trp His 240
Lys Pro Met 225 Lys	Glu 210 Pro Asn	195 Ala Pro Leu	180 His Ala Pro	Thr Glu Thr Leu 245	Arg Gly Arg 230 Glu	Ala Pro 215 Ile Gly	200 Glu Pro Leu	Arg Val Ser Arg	His Ala Asp 250	Lys Pro Gly 235 Trp	Asn 220 Glu Tyr	205 Pro Arg 11e	Gly Leu Ser Arg	Leu Gly Asn 255	Trp His 240 Ser
Lys Pro Met 225 Lys	Glu 210 Pro	195 Ala Pro Leu	180 His Ala Pro	Thr Glu Thr Leu 245	Arg Gly Arg 230 Glu	Ala Pro 215 Ile Gly	200 Glu Pro Leu	Arg Val Ser Arg	His Ala Asp 250	Lys Pro Gly 235 Trp	Asn 220 Glu Tyr	205 Pro Arg 11e	Gly Leu Ser Arg	Leu Gly Asn 255	Trp His 240 Ser
Lys Pro Met 225 Lys	Glu 210 Pro Asn	195 Ala Pro Leu	180 His Ala Pro	Thr Glu Thr Leu 245	Arg Gly Arg 230 Glu	Ala Pro 215 Ile Gly	200 Glu Pro Leu	Arg Val Ser Arg	His Ala Asp 250	Lys Pro Gly 235 Trp	Asn 220 Glu Tyr	205 Pro Arg 11e	Gly Leu Ser Arg	Leu Gly Asn 255	Trp His 240 Ser
Lys Pro Met 225 Lys Gly	Glu 210 Pro Asn	195 Ala Pro Leu Ala	180 His Ala Pro Ala Ala 260	Thr Glu Thr Leu 245 Gly	Arg Gly Arg 230 Glu Pro	Ala Pro 215 The Gly	200 Glu Pro Leu Arg	Arg Val Ser Arg Arg 265	His Ala Asp 250 Pro	Lys Pro Gly 235 Trp Val	Asn 220 Glu Tyr Leu	205 Pro Arg 11e Pro	Gly Leu Ser Arg Ser 270	Leu Gly Asn 255 Val	Trp His 240 Ser Gly
Lys Pro Met 225 Lys Gly	Glu 210 Pro Asn Leu	195 Ala Pro Leu Ala	180 His Ala Pro Ala Ala 260	Thr Glu Thr Leu 245 Gly	Arg Gly Arg 230 Glu Pro	Ala Pro 215 The Gly	200 Glu Pro Leu Arg	Arg Val Ser Arg Arg 265	His Ala Asp 250 Pro	Lys Pro Gly 235 Trp Val	Asn 220 Glu Tyr Leu	205 Pro Arg 11e Pro	Gly Leu Ser Arg Ser 270	Leu Gly Asn 255 Val	Trp His 240 Ser Gly
Lys Pro Met 225 Lys Gly Pro	Glu 210 Pro Asn Leu	195 Ala Pro Leu Ala His 275	180 His Ala Pro Ala Ala 260 Pro	Thr Glu Thr Leu 245 Gly Pro	Arg Gly Arg 230 Glu Pro	Ala Pro 215 Jie Gly Gln Leu	200 Glu Pro Leu Arg His 280	Arg Val Ser Arg Arg 265 Ala	His Ala Asp 250 Pro	Lys Pro Gly 235 Trp Val Cys	Asn 220 Glu Tyr Leu Tyr	205 Pro Arg 11e Pro Glu 285	Gly Leu Ser Arg Ser 270 Val	Leu Gly Asn 255 Val	Trp His 240 Ser Gly
Lys Pro Met 225 Lys Gly Pro	Glu 210 Pro Asn Leu Pro	195 Ala Pro Leu Ala His 275	180 His Ala Pro Ala Ala 260 Pro	Thr Glu Thr Leu 245 Gly Pro	Arg Gly Arg 230 Glu Pro	Ala Pro 215 Jie Gly Gln Leu	200 Glu Pro Leu Arg His 280	Arg Val Ser Arg Arg 265 Ala	His Ala Asp 250 Pro	Lys Pro Gly 235 Trp Val Cys	Asn 220 Glu Tyr Leu Tyr	205 Pro Arg 11e Pro Glu 285	Gly Leu Ser Arg Ser 270 Val	Leu Gly Asn 255 Val	Trp His 240 Ser Gly
Lys Pro Met 225 Lys Gly Pro Ala	Glu 210 Pro Asn Leu Pro	195 Ala Pro Leu Ala His 275 Tyr	180 His Ala Pro Ala Ala 260 Pro	Thr Glu Thr Leu 245 Gly Pro	Arg Gly Arg 230 Glu Pro Phe	Ala Pro 215 The Gly Gln Leu Ser 295	200 Glu Pro Leu Arg His 280 Gln	Arg Val Ser Arg Arg 265 Ala	His Ala Asp 250 Pro Arg	Lys Pro Gly 235 Trp Val Cys Leu	Asn 220 Glu Tyr Leu Tyr Pro 300	205 Pro Arg 11e Pro Glu 285 His	Gly Leu Ser Arg Ser 270 Val	Leu Gly Asn 255 Val Gly	Trp His 240 Ser Gly

<210> 3298 <211> 118 <212> PRT <213> Homo sapiens <400> 3298 Met Ile Val Glu His Leu Ser Glu Pro Lys Ser Leu Gly Glu Cys Gly Asp Phe Leu Glu Gly Gly Cys Arg Leu Pro Glu Ser Pro Pro Asn Gly 25 30 Arg Ala Glu Lys Gly Glu Gly Gly Gly Cys Ser Gln Glu Gly Ala 40 Arg Glu Glu Gln Gly Leu Gly Ala Ser Arg Asn Met Pro Ala Val Gly 50 55 60 Gly Arg Gly Arg Gly Ala Thr Val Asn Gly Phe Pro Ser Glu Val Val 70 75 65 Gly Ala Asp Gly Ser Phe Cys Leu Leu Ala Leu Lys Arg Val Phe Cys 85 90 Gln Gly His Ser Leu Phe Leu Leu Arg Lys His Pro Pro Asn Ala Asn 100 105 110 Asn Ile Pro Thr Ser Cys 115 <210> 3299 <211> 159 <212> PRT <213> Homo sapiens <400> 3299 Met Arg Arg Gly Ala Pro Arg Pro Gly Pro Pro Thr Pro Ala Leu Pro 10 Gly Pro Pro Leu Trp Ala Ser Val Ser lle Pro Ala Pro Gly Lys Gly 30 20 25

Gly Arg Leu Glu Ser Arg Ser Arg Ala Arg Ser Pro Gly Val Pro Ala

35 40 45

Ala Ala Glu Cys Lys Val Ala Ala Phe Ser Leu Leu Arg Gly Ile Ser 50 55 Glu lle Ser Gln Glu Gly Thr Phe Gly Arg Phe Trp Gly Gln Leu Gly 70 75 Ser Asn Arg Gly Ser Arg Thr Pro Lys Gly Glu Ser Pro Ala Ser Glu 85 90 Asp Gly Glu Glu Gly Gly Ala Leu Ala Lys Gly Ala Leu Pro Tyr Gln 100 110 Pro Gly Leu Leu Lys Arg Gly Asp Phe Glu Trp Val Thr Ser Pro Ala 120 Trp Ala Arg Ser Val Glu Gly Gly Pro Ala Gln Arg Val Asn Arg Leu 130 135 140 Glu Val Cys Asp Gln Gly Gln Pro Ala Val Arg Ala Cys Gly Arg 145 150 155

<210> 3300

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3300

Met Gly Asp Arg Ser Gly Gln Gln Glu Arg Ser Val Pro His Ser Pro

1 5 10 15

Gly Ala Pro Val Gly Thr Ser Ala Ala Ala Val Asn Glu Leu Leu His 20 25 30

Asn Gly Phe His Pro Pro Pro Val Gln Pro Pro His Val Cys Ser Arg 35 40 45

Gly Pro Val Gly Gly Ser Asp Ala Ala Pro Gln Arg Leu Pro Leu Leu 50 55 60

Pro Glu Leu Gln Pro Gln Pro Leu Leu Pro Gln His Asp Ser Pro Ala 65 70 75 80

Lys Lys Cys Arg Leu Arg Arg Arg Met Asp Ser Gly Arg Lys Asn Arg

85

90

Pro	Pro	Phe	Pro	Trp	Phe	Gly	Met	Asp	Пе	Gly	Gly	Thr	Leu	Val	Lys
			100					105					110		
Leu	Val	Tyr	Phe	Glu	Pro	Lys	Asp	He	Thr	Ala	Glu	Glu	Glu	Gln	Glu
		115					120					125			
Glu	Val	Glu	Asn	Leu	Lys	Ser	He	Arg	Lys	Tyr	Leu	Thr	Ser	Asn	Thr
	130					135					140				
Ala	Tyr	Gly	Lys	Thr	Gly	He	Arg	Asp	Val	His	Leu	Glu	Leu	Lys	Asn
145					150					155					160
Leu	Thr	Met	Cys	Gly	Arg	Lys	Gly	Asn	Leu	His	Phe	He	Arg	Phe	Pro
				165					170					175	
Ser	Cys	Ala	Met	His	Arg	Phe	lle	G1n	Met	Gly	Ser	Glu	Lys	Asn	Phe
			180					185					190		
Ser	Ser	Leu	His	Thr	Thr	Leu	Cys	Ala	Thr	Gly	Gly	Gly	Ala	Phe	Lys
		195					200					205			
Phe	Glu	Glu	Asp	Phe	Arg	Met	He	Ala	Asp	Leu	Gln	Leu	His	Lys	Leu
	210					215					220				
Asp	Glu	Leu	Asp	Cys	Leu	lle	Gln	Gly	Leu	Leu	Tyr	Val	Asp	Ser	Val
225					230					235					240
Gly	Phe	Asn	Gly		Pro	Glu	Cys	Tyr		Phe	Glu	Asn	Pro		Asn
				245					250					255	
Pro	Glu	Leu		Gln	Lys	Lys	Pro		Cys	Leu	Asp	Asn		Tyr	Pro
			260					265					270		
Met	Leu		Val	Asn	Met	Gly		G1 y	Val	Ser	He		Ala	Val	Tyr
	_	275					280			en.		285		0.3	
Ser		Asp	Asn	Tyr	Lys		Val	Thr	Gly	Thr		Leu	Gly	Gly	Gly
m.	290		6.1	,		295	,		T)	61	300	0.1	T.)	Di	0.1
	Phe	Leu	Gly	Leu	Cys	Cys	Leu	Leu	Ihr		Cys	Glu	ihr	Phe	
305	. 1		61		310	4.3	1	61		315	TI)		17 7		320
Glu	Ala	Leu	Glu		Ala	Ala	Lys	Gly		Ser	Ihr	Asn	Val		Lys
,	17 1			325	т	61	C1		330	61		DI	C1	335	61
Leu	val	Lys	-	116	Tyr	61 y	Gly	-	lyr	61 u	Arg	rne		Leu	GIn
C1	C		340	A 1	C	C	131	345		14 .		C	350	0.1	
оту	ser		val	Ala	Ser	ser		61 y	ASN	Me t	met		Lys	U.LU	Lys
۸ -	Δ.	355	7.7	C		C 1	360	1.	A 1	Α.,	A 7	365	,	17. 1	TI
Arg		5er	116	5er	Lys		Asp	Leu	Ala	Arg		Inr	Leu	vai	ihr
	370					375					380				

lle Thr Asn Asn Ile Gly Ser Ile Ala Arg Met Cys Ala Leu Asn Glu Asn Ile Asp Arg Val Val Phe Val Gly Asn Phe Leu Arg Ile Asn Met Val Ser Met Lys Leu Leu Ala Tyr Ala Met Asp Phe Trp Ser Lys Gly Gln Leu Lys Ala Leu Phe Leu Glu His Glu Gly Tyr Phe Gly Ala Val Gly Ala Leu Leu Glu Leu Phe Lys Met Thr Asp Asp Lys

<210> 3301

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3301

Met Thr Val Leu His Tyr Leu Asp Ser Ala Gln Glu Ala Thr Met Met Tyr Gln Tyr Ser Gln His Leu Asp Asp Val Thr Leu Leu Cys Leu Gly Pro Val Tyr Ile Val Tyr Glu Thr Tyr Val Trp Val His His Leu Val Asp Val Thr Leu Leu His Gly Leu Cys Pro Trp Arg Cys Glu 11e Phe Phe His Ser Ser Pro Ala Ile Ser Leu Leu Cys Leu Phe Cys Leu Gly Leu Ala Lys Lys Arg Ile Ile Val Tyr His Trp Thr Gln Asn Leu Gly Glu Val Thr Pro Ile Leu Pro Gly Ala His lle Phe Gly Tyr Cys Asp lle Gly Asp Gly Trp Glu Ala His Glu Trp Ala Leu Leu Thr Glu Gly Leu Val Thr Ser Gln His Ser Leu Pro Arg Lys Cys Asp Tyr Cys Leu

Pro Phe Ala Pro Cys Leu Gln Gly Arg Leu 145 150

<210> 3302

(211) 183

<212> PRT

<213> Homo sapiens

⟨400⟩ 3302

Met Ala His Cys Ser Leu Asn Leu Leu Gly Ser Asn Lys Pro Pro Thr

1 5 10 15

Leu Ala Ser Gln Val Ala Gly Thr Ile Gly Thr His His Wal Arg
20 25 30

Pro 11e Phe Val Phe Phe Lys Glu Thr Gly Cys His Cys Val Ala Gln 35 40 45

Ala Gly Leu Gln Leu Leu Gly Ser Ser Asn Leu Ser Ala Leu Val Ser 50 55 60

Gln Thr Ala Gly Ser Ile Val Val Asn Gln Arg Ala Gln Pro Pro Ser 65 70 75 80

Leu Ser Val Ser Val Phe Leu Cys Ser Ser Leu Ser Leu Leu Phe Leu

85

90

95

Ser Leu Pro IIe Ser Leu Ser Phe Leu Ser Val Ser Ala Ser Val Cys 100 105 110

Val Cys Phe Leu Ser Leu Phe Ser Val Cys Leu Cys Leu Pro Leu Pro 115 120 125

Val Ser Pro Leu Val Cys Ala Ser Leu Cys Leu Ser Leu Ala Leu Leu 130 135 140

Cys Leu Ser Leu Phe Leu Gln Arg Ala Phe Pro His Val Tyr Pro Leu 145 150 155 160

Val Pro Pro Tyr Ser Val Leu Pro Tyr Pro Gly Ser Ser Tyr Leu Ser 165 170 175

Ala Phe Leu Glu Pro Gly Asp

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<210> 3303
<211> 650
<212> PRT
<213> Homo sapiens
<400> 3303
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Met Ala Arg Ser Pro Thr Thr His Pro Pro Ala Asn Thr Tyr Leu Pro

1 5 10 15

Gln Tyr Gly Gly Tyr Gly Ala Gly Gln Ser Val Phe Ala Pro Thr Lys

20 25 30

Pro Phe Thr Gly Gln Asp Cys Ala Asn Ser Lys Asp Cys Ser Phe Ala Tyr Gly Ser Gly Asn Ser Leu Pro Ala Ser Pro Ser Ser Ala His Ser 50 60 Ala Gly Tyr Ala Pro Pro Pro Thr Gly Gly Pro Cys Leu Pro Pro Ser 70 75 Lys Ala Ser Phe Phe Ser Ser Ser Glu Gly Ala Pro Phe Ser Gly Ser 85 90 Ala Pro Thr Pro Leu Arg Cys Asp Ser Arg Ala Ser Thr Val Ser Pro 105 Gly Gly Tyr Met Val Pro Lys Gly Thr Thr Ala Ser Ala Thr Ser Ala 120 Ala Ser Ala Ala Ser Ser Ser Ser Ser Phe Gln Pro Ser Pro Glu 130 135 140 Asn Cys Arg Gln Phe Ala Gly Ala Ser Gln Trp Pro Phe Arg Gln Gly

 145
 150
 155
 160

 Tyr Gly Gly Leu Asp Trp Ala Ser Glu Ala Phe Ser Gln Leu Tyr Asn
 165
 170
 175

 Pro Ser Phe Asp Cys His Val Ser Glu Pro Asn Val Ile Leu Asp Ile
 180
 185
 190

Ser Asn Tyr Thr Pro Gln Lys Val Lys Gln Gln Thr Ala Val Ser Glu 195 200 205

Thr Phe Ser Glu Ser Ser Ser Asp Ser Thr Gln Phe Asn Gln Pro Val
210 215 220

Gly Gly Gly Gly Phe Arg Arg Ala Asn Ser Glu Ala Ser Ser Glu

225					230					235					240
Gly	Gln	Ser	Ser	Leu	Ser	Ser	Leu	Glu	Lys	Leu	Met	Met	Asp	Trp	Asn
				245					250					255	
Glu	Ala	Ser	Ser	Ala	Pro	Gly	Tyr	Asn	Trp	Asn	Gln	Ser	Val	Leu	Phe
			260					265					270		
Gln	Ser	Ser	Ser	Lys	Pro	Gly	Arg	Gly	Arg	Arg	Lys	Lys	Val	Asp	Leu
		275					280					285			
Phe	Glu	Ala	Ser	His	Leu	Gly	Phe	Pro	Thr	Ser	Ala	Ser	Ala	Ala	Ala
	290					295					300				
Ser	Gly	Tyr	Pro	Ser	Lys	Arg	Ser	Thr	Gly	Pro	Arg	Gln	Pro	Arg	Gly
305					310					315					320
Gly	Arg	Gly	Gly	Gly	Ala	Cys	Ser	Ala	Lys	Lys	Glu	Arg	Gly	Gly	Ala
				325					330					335	
Ala	Ala	Lys	Ala	Lys	Phe	He	Pro	Lys	Pro	Gln	Pro	Val	Asn	Pro	Leu
			340					345					350		
Phe	Gln	Asp	Ser	Pro	Asp	Leu	Gly	Leu	Asp	Tyr	Tyr	Ser	Gly	Asp	Ser
		355					360					365			
Ser	Met	Ser	Pro	Leu	Pro	Ser	Gln	Ser	Arg	Ala	Phe	Gly	Val	Gly	Glu
	370					375					380				
Arg	Asp	Pro	Cys	Asp	Phe	Ile	Gly	Pro	Tyr	Ser	Met	Asn	Pro	Ser	Thr
385					390					395					400
Pro	Ser	Asp	Gly	Thr	Phe	Gly	Gln	Gly	Phe	His	Cys	Asp	Ser	Pro	Ser
				405					410					415	
Leu	Gly	Ala	Pro	Glu	Leu	Asp	Gly	Lys	His	Phe	Pro	Pro	Leu	Ala	His
			420					425					430		
Pro	Pro	Thr	Val	Phe	Asp	Ala	Gly	Leu	Gln	Lys	Ala	Tyr	Ser	Pro	Thr
		435					440					445			
Cys	Ser	Pro	Thr	Leu	Gly	Phe	Lys	Glu	Glu	Leu	Arg	Pro	Pro	Pro	Thr
	450					455					460				
Lys	Leu	Ala	Ala	Cys	Glu	Pro	Leu	Lys	His	Gly	Leu	Gln	Gly	Ala	
465					470					475					480
Leu	Gly	His	Ala		Ala	Ala	Gln	Ala	His	Leu	Ser	Cys	Arg	Asp	Leu
				485					490					495	
Pro	Leu	Gly	Gln	Pro	His	Tyr	Asp		Pro	Ser	Cys	Lys		Thr	Ala
			500					505					510		
Tvr	Trn	Tyr	Pro	Pro	G1v	Ser	Ala	Ala	Ara	Sar	Pro	Pro	Tyr	Glu	G1v

Lys Val Gly Thr Gly Leu Leu Ala Asp Phe Leu Gly Arg Thr Glu Ala Ala Cys Leu Ser Ala Pro His Leu Ala Ser Pro Pro Ala Thr Pro Lys Ala Asp Lys Glu Pro Leu Glu Met Ala Arg Pro Pro Gly Pro Pro Arg Gly Pro Ala Ala Ala Ala Gly Tyr Gly Cys Pro Leu Leu Ser Asp Leu Thr Leu Ser Pro Val Pro Arg Asp Ser Leu Leu Pro Leu Gln Asp Thr Ala Tyr Arg Tyr Pro Gly Phe Met Pro Gln Ala His Pro Gly Leu Gly Gly Gly Pro Lys Ser Gly Phe Leu Gly Pro Met Ala Glu Pro His Pro Glu Asp Thr Phe Thr Val Thr Ser Leu

<210> 3304

<211> 893

<212> PRT

<213> Homo sapiens

<400> 3304

 Met Gly Arg Met Gly Lys Gly Cys Pro Ala Ser Gly Pro Arg Ser Trp

 1
 5
 10
 15

 Leu Leu Ser Asp Glu Leu Val Gln Gly Ser Arg Ala Gly Val Ser Ala
 20
 25
 30

 Ser Phe Pro Val Gly Phe Arg Glu Gly Gly Gly Gly Gly Asp Phe Arg
 35
 40
 45

 Arg Gly Asp Val Gly Leu Gln Asp Gly Gly Gly Val Arg Val Arg Val Ile
 55
 60

 11e Phe Ala Phe Ser Leu His Ser Leu Leu Ser Arg Phe Leu Pro Gly
 65
 70
 75
 80

Gly Asp Ala Ser Leu Met Glu Leu Glu Lys Arg Lys Glu Asn Arg Phe

				85					90					95	
Val	Glu	Arg	Gln	Ser	He	Val	Pro	Leu	Arg	Leu	He	Tyr	Arg	Ser	Gly
			100					105					110		
Gly	Glu	Asp	Glu	Ser	Arg	His	Asp	Ala	Leu	Asp	Thr	Arg	Val	Arg	Gly
		115					120					125			
Asp	Leu	Gly	Gly	Arg	Gln	Leu	Thr	His	Val	Asp	Gln	Ala	Ser	Phe	Gln
	130					135					140				
Val	Asp	Ala	Phe	Gly	Thr	Ser	Phe	He	Leu	Asp	Val	Val	Leu	Asn	His
145					150					155					160
Asp	Leu	Leu	Ser	Ser	Glu	Tyr	He	Glu	Arg	His	He	Glu	His	Gly	Gly
				165					170					175	
Lys	Thr	Val	Glu	Val	Lys	Gly	Gly	Glu	His	Cys	Tyr	Tyr	Gln	Gly	His
			180					185					190		
He	Arg	Gly	Asn	Pro	Asp	Ser	Phe	Val	Ala	Leu	Ser	Thr	Cys	His	Gly
		195					200					205			
Leu		Gly	Met	Phe	Tyr	Asp	Gly	Asn	His	Thr	Tyr	Leu	He	Glu	Pro
	210					215					220				
	Glu	Asn	Asp	Thr		Gln	Glu	Asp	Phe		Phe	His	Ser	Val	
225					230		_			235					240
Lys	Ser	Arg	Leu	Phe	Glu	Phe	Ser	Leu		Asp	Leu	Pro	Ser		Phe
0.1	0.1	., .		245	m.	Б		,	250	7.1	,			255	Б
GIn	GIn	Val		He	Thr	Pro	Ser		Phe	He	Leu	Lys		Arg	Pro
		C	260		61	,		265	т	n			270	6.1	C 1
Lys	Arg		Lys	Arg	GIn	Leu		Arg	lyr	Pro	Arg		val	GIu	Glu
C1	Thu	275	Т	Tla	C1		280 Mat	11.	Val	A	۸	285	1	Mat	Dlag
GIU	290	Lys	I y I	He	GIU	295	Me t	11e	vai	ASII	300	птѕ	Leu	меι	rne
lve		Hic	Δκα	Leu	Sor		Val	Hic	Thr	Acn		Tyr	Δla	Lve	Sor
305	Lys	1115	лгg	Leu	310	vai	vai	1112	1111	315	1111	1 9 1	пта	Lys	320
	Val	Asn	Met	Ala		Len	He	Tyr	lve		Gln	Len	lve	Thr	
, (1)		71311	inc c	325	пор	,,cu	.110	1,1	330	пор	0111	Bea	Lys	335	m s
He	Val	Leu	Val	Ala	Met	Glu	Thr	Trn		Thr	Asn	Asn	lvs		Ala
		200	340			0.4		345					350		
He	Ser	Glu		Pro	Leu	He	Thr		Arg	Glu	Phe	Met		Tvr	Arg
		355					360		3			365	•	,	5
Arg	Asp		He	Lys	Glu	Lys		Asp	Ala	Val	His		Phe	Ser	G1 y

•	370					375					380				
Ser	Gln	Phe	Glu	Ser	Ser	Arg	Ser	Gl y	Ala	Ala	Tyr	lle	Gly	Gly	Ile
385					390					395					400
Cys	Ser	Leu	Leu	Lys	Gly	Gly	Gly	Val	Asn	Glu	Phe	Gly	Lys	Thr	Asp
				405					410					415	
Leu	Met	Ala	Val	Thr	Leu	Ala	Gln	Ser	Leu	Ala	His	Asn	Ile	Gly	He
			420					425					430		
He	Ser	Asp	Lys	Arg	Lys	Leu	Ala	Ser	Gly	Glu	Cys	Lys	Cys	Glu	Asp
		435					440					445			
Thr	Trp	Ser	Gly	Cys	Ile	Met	Gly	Asp	Thr	Gly	Tyr	Tyr	Leu	Pro	Lys
	450					455					460				
Lys	Phe	Thr	Gln	Cys	Asn	lle	Glu	Glu	Tyr	His	Asp	Phe	Leu	Asn	Ser
465					470					475					480
G1 y	Gly	Gly	Ala	Cys	Leu	Phe	Asn	Lys		Ser	Lys	Leu	Leu		Pro
_				485					490					495	
Pro	Glu	Cys		Asn	Gly	Phe	He		Thr	Gly	Glu	Glu		Asp	Cys
61	m.i	n	500	0.1				505					510	_	_
GIy	lhr		Ala	Glu	Cys	Val		Glu	Gly	Ala	Glu		Cys	Lys	Lys
Cur	Tl	515	Tl	C1	Λ	C	520	Corr	C	Δ	C1	525	C	C	
Cys	530	Leu	Inr	Gln	ASP	535	GIN	Cys	ser	Asp		Leu	Cys	Cys	Lys
lve		lve	Pho	Gln	Pro		Glv	Thr	Val	Cve	540	Clu	ΔΙα	Val	Acn
545	Cys	Lys	1110	OIII	550	MCC	Oly	1111	101	555	мg	Olu	піа	vai	560
	Cvs	Asn	He	Arg		Thr	Cvs	Ser	Glv		Ser	Ser	G1n	Cvs	
	0,0	пор		565	010	••••	C, C	501	570	71511	501	561	0111	575	1110
Pro	Asn	He	His	Lys	Met	Asp	Gly	Tyr		Cys	Asp	Gly	Val		Gly
			580	-		•	·	585		•	•	•	590		-
Пe	Cys	Phe	Gly	Gly	Arg	Cys	Lys	Thr	Arg	Asp	Arg	Gln	Cys	Lys	Tyr
		595					600					605			
11e	Trp	Gly	Gln	Lys	Val	Thr	Ala	Ser	Asp	Lys	Tyr	Cys	Tyr	Glu	Lys
	610					615					620				
Leu	Asn	He	Glu	Gly	Thr	Glu	Lys	Gly	Asn	Cys	Gly	Lys	Asp	Lys	Asp
625					630					635					640
Thr	Trp	He	Gln	Cys	Asn	Lys	Arg	Asp	Val	Leu	Cys	Gly	Tyr	Leu	Leu
				645					650					655	
Cve	Thr	Acn	aff	G1v	Acn	110	Pro	Ara	Lou	G1v	G1u	Lou	Acn	C1v	C1n

			660					665					670		
lle	Thr	Ser	Thr	Leu	Val	Val	Gln	Gln	G1 y	Arg	Thr	Leu	Asn	Cys	Ser
		675					680					685			
Gly	Gly	His	Val	Lys	Leu	Glu	Glu	Asp	Val	Asp	Leu	Gly	Tyr	Val	Glu
	690					695					700				
Asp	Gly	Thr	Pro	Cys	Gly	Pro	Gln	Met	Met	Cys	Leu	Glu	His	Arg	Cys
705					710					715					720
Leu	Pro	Val	Ala	Ser	Phe	Asn	Phe	Ser	Thr	Cys	Leu	Ser	Ser	Lys	Glu
				725					730					735	
Gly	Thr	Ile	Cys	Ser	Gly	Asn	Gly	Val	Суѕ	Ser	Asn	Glu	Leu	Lys	Cys
			740					745					750		
Val	Cys	Asn	Arg	His	Trp	11e	G1 y	Ser	Asp	Cys	Asn	Thr	Tyr	Phe	Pro
		755					760					765			
His	Asn	Asp	Asp	Ala	Lys	Thr	Gly	He	Thr	Leu	Ser	Gly	Asn	Gly	Val
	770					775					780				
Ala	Gly	Thr	Asn	He	Ile	He	Gly	lle	lle	Ala	G1 y	Thr	lle	Leu	Val
785					790					795					800
Leu	Ala	Leu	lle	Leu	Gly	Ile	Thr	Ala	Trp	Gly	Tyr	Lys	Asn	Tyr	Arg
				805					810					815	
Glu	Gln	Arg	Gln	Leu	Pro	Gln	Gly	Asp	Tyr	Val	Lys	Lys	Pro	Gly	Gly
			820					825					830		
Gly	Asp	Ser	Phe	Tyr	Ser	Asp	Пе	Pro	Pro	Gly	Val	Ser	Thr	Asn	Ser
		835					840					845			
Ala	Ser	Ser	Ser	Lys	Lys	Arg	Ser	Asn	Gly	Leu	Ser	His	Ser	Trp	Ser
	850					855					860				
Glu	Arg	Пе	Pro	Asp	Thr	Lys	His	He	Ser	Asp	lle	Cys	Glu	Asn	G1 y
865					870					875					880
Arg	Pro	Arg	Ser	Asn	Ser	Trp	Gln	Gly	Asn	Leu	Gly	G]y			
				885					890						

<210> 3305

⟨211⟩ 119

<212> PRT

<213> Homo sapiens

<400> 3305 Met Phe Leu Gln Pro Ser Thr Pro Ser Ser Phe Ala Ser His Pro Ser 10 5 Leu Leu His Leu Phe Ser Tyr Ile His Tyr Gly Phe Pro Phe Phe 25 20 30 Gln Lys Ser Thr Ser Ser Leu Thr Phe Gly Asp Gly Gly Arg Val Pro 40 45 Gln Ile Val Pro Asp Leu Ala Ser Glu Ser Pro Phe Glu Cys Leu Leu 50 55 Tyr Pro Ser Ile Phe Gly Ser Thr Pro Leu Ile Ser Asp Leu Thr Arg Cys Ser Gly Pro Leu Gly Thr Ser His Gly Ser Val Phe Val Pro Gly 90 Ala Leu Val Pro Gly Thr Arg Cys Ala Tyr Cys Ser Trp Gly Val Phe 100 105 110 Ala Ser Cys Pro Ile Asp Asp 115

<210> 3306 <211> 208

<212> PRT

<213> Homo sapiens

<400> 3306

Met Ser His Pro Ala Trp Thr Pro Cys Arg Ala Ser Pro Lys Arg Gln
1 5 10 15

Trp Thr Gln Ala Gly Ser Ser Thr Cys Thr Pro Ala Leu Arg His Ala 20 25 30

Phe Ser Leu Asp Val Ala Ser Ala Trp Val Leu Pro Leu Arg Thr Ser
35 40 45

Arg Gly Ala Gly Gly Ala Ala Cys Cys His Pro His Trp Gly His Lys
50 55 60

Thr Ser Ala Val Glu Gly Ala Gln Ser Gln Leu His Pro Gly Pro Ser 65 70 75 80

Thr Ala Pro Arg Cys Gln Val Leu Leu Pro His Ser Pro Gly Pro Trp

				85					90					95	
Pro	Ala	Gly	Ala	G1 y	Ala	Thr	Pro	Ala	Trp	Gly	Pro	Ala	Glu	Gly	Gly
			100					105					110		
Trp	Ala	Ser	Ser	G1n	Asp	Pro	Gln	His	Leu	Leu	Leu	Glu	Arg	Gly	Gly
•		115					120					125			
Arg	Ala	Ser	Asp	Pro	Val	Pro	Ala	Arg	Trp	${\sf Glu}$	Gln	Asp	Thr	Asp	Gly
	130					135					140				
Phe	Val	Leu	Met	Ala	Asn	Ala	Ser	Glu	Met	Asp	Arg	Gln	Ser	His	Pro
145					150					155					160
Val	Ala	Phe	Thr	Val	Thr	He	Leu	Pro	Val	Asn	Gly	Gln	Pro	Pro	Thr
				165					170					175	
Ser	Tyr	Lys	Leu	Arg	Pro	Ala	Gly	Ala	Leu	Asp	Gly	Gly	lle	His	Phe
			180					185					190		
Gly	Leu	Ser	Asp	Gly	G] u	His	Thr	Ser	Ser	Arg	His	Leu	Ser	Ser	Glu
		195					200					205			

<210> 3307

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3307

Met Leu Thr Leu His Gly Ala Ser Ser Arg Phe Pro Gly Lys Ser Gly 1 5 10 15 Ser Arg Arg Ser Ser Leu Ile Ser Gln Pro Leu Trp Arg Arg Glu Tyr 25 Gln Lys Gln Asp Glu Ser Gln Val Lys Ser Leu Ser Leu Gly Ser Pro 40 45 Lys Gly Gln Val Leu Thr Ser Gln Arg Pro Gly Pro Ala Gly Pro His 50 55 Gly Ser Thr Thr Pro Ser Arg Cys Pro Arg Pro Phe Val Ser His Pro 70 75 Ala Phe Ser Arg 11e Ser Lys Asp Ala Arg Leu Asp Pro Gln Ser Trp 85 90 95

Lys Thr Ala Val Pro Gly Ser His Gln Asn Gly Glu Ala Ser Ser Ser

100 105 110

His

<210> 3308

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3308

Met Lys Leu Arg Cys Tyr Leu Lys Leu Thr Ala Pro Asn Arg Pro Asp

1 5 10 15

Ser Gln Cys Pro Pro Arg Thr Ser Val Pro Ala Asp Leu Ala Ser Gly
20 25 30

Val Thr Ser Gly Glu Pro Phe Lys Ser Pro His Leu Ala Ser His Ser 35 40 45

Trp Pro Thr Leu Cys Ser Arg Ala Asn Gln Val Ala Asn Asp Lys Arg 50 55 60

Leu Ser Trp Pro Asn Ser Ser Leu Ala Trp lle Thr Pro lle Arg Cys
65 70 75 80

Gln Arg Cys Leu Leu Arg Trp Lys Asn Gln Ser Gly Ser Gly Val Arg 85 90 95

His Gln Gly Lys Gln Ala Asp Leu Glu Glu Ile Lys Tyr Ala Cys Ser 100 105 110

Leu Pro lle Gln Val

115

<210> 3309

<211> 131

<212> PRT

<213≻ Homo sapiens

<400> 3309

Met Val Pro Arg Pro Leu Gln Thr Arg Val Pro Gly Cys Phe Ser Lys

Gly Cys Glu Gly Thr Gly Gln Arg Gly Trp Val Trp Gly Arg Glu His lle Asp Val Gly Ala His Ser Val Gly Thr Gly Arg Gln Leu Leu Cys Gln Ala Phe lle Phe Pro lle Leu Tyr Met Arg Lys Leu Gly Ser Gly Gly Glu Gly Cys Leu Ala Asp Val Trp Pro Gly Gly Gly Gly Pro Gly Leu Glu Pro Gln Ala Pro Pro Ser Ser Cys Lys Ser Pro Ala Gln Arg Arg Gly Gly Ser Trp Gly Leu Ser Ser Leu Gln Asp Arg Val His Leu Ser Ser Ser Ile Ile His Ser Phe Ile His Ser Phe Asn Lys Cys Leu Ala Ser Gly <210> 3310 <211> 157 <212> PRT <213> Homo sapiens <400> 3310 Met Leu Ala Glu Trp Gly Ala Cys Leu Leu Leu Ala Val Ala Leu Leu Gly Pro Gly Leu Gln Ala Gln Ala Met Glu Gly Val Lys Cys Gly Gly Val Leu Ser Ala Pro Ser Gly Asn Phe Ser Ser Pro Asn Phe Pro Arg

Leu Tyr Pro Tyr Asn Thr Glu Cys Ser Trp Leu lle Val Val Ala Glu

Gly Ser Ser Val Leu Leu Thr Phe His Ala Phe Asp Leu Glu Tyr His

Asp Thr Cys Ser Phe Asp Phe Leu Glu 11e Tyr Asn Gly Ala Ser Pro

Asp Lys Gly Asn Leu Leu Gly Arg Phe Cys Gly Lys Val Pro Pro Pro Pro Phe Thr Ser Ser Trp His Val Met Ser Val Ile Phe His Ser Asp Lys His Val Ala Ser His Gly Phe Ser Ala Gly Tyr Gln Lys Gly Gln Arg Gly Ala Leu Gly Thr Cys Cys Ser Gly Ser His Leu

<210> 3311

<211> 630

<212> PRT

<213> Homo sapiens

<400> 3311

Met Lys Ile Gly Gln Gly Lys Tyr Glu Pro Gly Phe Phe Pro Lys Leu I Gln Ser Asp Val Leu Ser Thr Gly Pro Ala Ser Asn Lys Trp Thr Lys Arg Asn Ala Pro Ala Gln Trp Arg Arg Lys Asp Arg Gln Lys Gln His Thr Glu His Leu Arg Leu Asp Asn Asp Gln Arg Glu Lys Tyr lle Gln Glu Ala Arg Thr Met Gly Ser Thr 11e Arg Gln Pro Lys Leu Ser Asn Leu Ser Pro Ser Val Ile Ala Gln Thr Asn Trp Lys Phe Val Glu Gly Leu Leu Lys Glu Cys Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly Arg Glu Ala Val Glu Leu Gly His Gly Glu Val Asn lle Thr

Gly Val Glu Glu Asn Thr Leu 11e Ala Ser Leu Cys Asp Leu Leu Glu

Arg	He	Trp	Ser	His	Gly	Leu	Gln	Val	Lys	Gln	Gly	Lys	Ser	Ala	Leu
145					150					155					160
Trp	Ser	His	Leu	Leu	His	Tyr	Gln	Asp	Asn	Arg	Gln	Arg	Lys	Leu	Thr
				165					170					175	
Ser	Gly	Ser	Leu	Ser	Thr	Ser	G]y	He	Leu	Leu	Asp	Ser	Glu	Arg	Arg
			180					185					190		
Lys	Ser	Asp	Ala	Ser	Ser	Leu	Met	Pro	Pro	Leu	Arg	lle	Ser	Leu	He
		195					200					205			
Gln	Asp	Met	Arg	His	He	Gln	Asn	Ile	G1 y	Glu	Ile	Lys	Thr	Asp	Val
	210					215					220				
Gly	Lys	Ala	Arg	Ala	Trp	Val	Arg	Leu	Ser	Met	Glu	Lys	Lys	Leu	Leu
225					230					235					240
Ser	Arg	His	Leu	Lys	Gln	Leu	Leu	Ser	Asp	His	Glu	Leu	Thr	Lys	Lys
				245					250					255	
Leu	Tyr	Lys	Arg	Tyr	Ala	Phe	Leu	Arg	Cys	Asp	Asp	Glu	Lys	Glu	Gln
			260					265					270		
Phe	Leu	Tyr	His	Leu	Leu	Ser	Phe	Asn	Ala	Val	Asp	Tyr	Phe	Cys	Phe
		275					280					285			
Thr	Asn	Val	Phe	Thr	Thr	lle	Leu	He	Pro	Tyr	His	He	Leu	He	Val
	290					295					300				
	Ser	Lys	Lys	Leu		Gly	Ser	Met	Phe		Ala	Asn	Pro	Trp	
305					310					315					320
Cys	lle	Ser	Gly		Leu	Gly	Glu	Thr		He	Met	Gln	lle		Arg
				325					330					335	
Asn	Val	Leu		Met	Thr	Phe	Glu		Gln	Asn	Leu	Gly	Lys	Leu	Thr
			340					345					350		
Thr	Val		He	Gly	His	Asp		Ser	Gly	Leu	Tyr		Lys	Trp	Leu
	0.1	355					360					365		_	
Val		Tyr	Val	Met	Val	_	Asn	Glu	He	Thr	-	His	Thr	Tyr	Lys
	370					375					380				
	Pro	Cys	Gly	Arg		Leu	Gly	Lys	G1 y		Asp	Asp	Gly	Ser	
385					390					395					400
Glu	Arg	He	Leu		Gly	G1u	Leu	Leu		Ser	GIn	Pro	Glu		Asp
				405					410		_		_	415	
Glu	Arg	Pro		Arg	Thr	Pro	Pro		Gln	Gln	Ser	Pro	Ser	Val	He
			420					425					430		

Arg Arg Leu Val Thr Ile Ser Pro Asn Asn Lys Pro Lys Leu Asn Thr Gly Gln Ile Gln Glu Ser Ile Gly Glu Ala Val Asn Gly Ile Val Lys His Phe His Lys Pro Glu Lys Glu Arg Gly Ser Leu Thr Leu Leu Leu Cys Gly Glu Cys Gly Leu Val Ser Ala Leu Glu Gln Ala Phe Gln His Gly Phe Lys Ser Pro Arg Leu Phe Lys Asn Val Phe Ile Trp Asp Phe Leu Glu Lys Ala Gln Thr Tyr Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala lle Asn Asn Thr Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu Phe Asn Ile Thr Leu Glu Thr Ser Leu Val Lys Gly Ile Asp Ile

<210> 3312

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3312

Met Ser Arg Leu Ala Gly Gly Gln Ala Pro Tyr Leu Trp Glu Gln Gly

1 5 10 15

Phe Ala Gln Pro Pro Trp Asp Ala Leu Gly Leu Leu Thr Ala Gln Asp 25 Pro Ser Arg Glu Ala Ala Trp Ile Gly Gly Ser Gly Leu Thr Ala Gly 35 40 45 Leu Gly Leu Glu Pro Ser Pro Cys Pro Ala Gln Ala Pro Ala Glu Pro 55 Gly Ala Leu Ala Glu Ala Gly Leu Gly Ser Gly Ala Ala Arg Arg Pro 70 75 Pro Ile Ser His Ser Leu Gly Val Leu Arg Val Thr Gln Arg Thr Val 90 85 95 Lys Cys Trp Ile 100 <210> 3313 <211> 635 <212> PRT <213> Homo sapiens <400> 3313 Met Ser Thr Cys Cys Trp Cys Thr Pro Gly Gly Ala Ser Thr 11e Asp Phe Leu Lys Arg Tyr Ala Ser Asn Thr Pro Ser Gly Glu Phe Gln Thr 20 25 30 Ala Asp Glu Asp Leu Cys Tyr Cys Leu Glu Cys Val Ala Glu Tyr His Lys Ala Arg Asp Glu Leu Pro Phe Leu His Glu Val Leu Trp Glu Leu 55 Glu Thr Leu Arg Leu 11e Asn His Phe Glu Lys Ser Met Lys Ala Glu 65 70 75 80 lle Gly Asp Asp Asp Glu Leu Tyr Ile Val Asp Asn Asn Gly Glu Met 90 Pro Leu Phe Asp Ile Thr Gly Gln Asp Phe Glu Asn Lys Leu Arg Val 105 110 Pro Leu Leu Glu Ile Leu Lys Tyr Pro Tyr Leu Leu Leu His Glu Arg

120

125

Val	Asn	Glu	Leu	Cys	Val	Glu	Ala	Leu	Cys	Arg	Met	Glu	Gln	Ala	Asn
	130					135					140				
Cys	Ser	Phe	Gln	Val	Phe	Asp	Lys	His	Pro	Gly	lle	Tyr	Leu	Phe	Leu
145					150					155					160
Val	His	Pro	Asn	Glu	Met	Val	Arg	Arg	Trp	Ala	He	Leu	Thr	Ala	Arg
				165					170					175	
Asn	Leu	Gly	Lys	Val	Asp	Arg	Asp	Asp	Tyr	Tyr	Asp	Leu	Gln	Glu	Val
			180					185					190		
Leu	Leu	Cys	Leu	Phe	Lys	Val	Ile	Glu	Leu	Gly	Leu	Leu	Glu	Ser	Pro
		195					200					205			
Asp	He	Tyr	Thr	Ser	Ser	Val	Leu	Glu	Lys	Gly	Lys	Leu	Ile	Leu	Leu
	210					215					220				
Pro	Ser	His	Met	Tyr	Asp	Thr	Thr	Asn	Tyr	Lys	Ser	Tyr	Trp	Leu	Gly
225					230					235					240
He	Cys	Met	Leu		Thr	lle	Leu	Glu		Gln	Ala	Met	Asp		Leu
				245					250					255	
Leu	Leu	Gly		Asp	Lys	Gln	Asn		Phe	Met	Gln	Ser	lle	Leu	His
			260					265				_	270		
Thr	Met		Arg	Glu	Ala	Asp		Asp	Ser	Val	Asp		Phe	Trp	Pro
	,	275	0	D.		V 7	280	,				285	C		v 1
Ala		His	Cys	Phe	Met		He	Leu	Asp	Arg		Gly	Ser	Lys	Val
T	290	C1	,	м.		295 D	т1.	W . 1	A1.	101	300	ть	11.	11.	Δ
	Gly	GIn	Leu	Met		Pro	116	Val	Ala		GIN	Inr	He	116	
305	A 1 a	C = 10	Т	A ava	310	C1	11.	A 22 cr	u; a	315	A 22.00	Aan	Can	Con	320
ASII	Ala	ser	1 9 1	325	Arg	GIY	116	Arg	330	116	AIg	ASII	Ser	335	vai
Ara	The	Lve	Lou		Dro	Clu	Sor	Tur		Acn	Acn	Mot	Val		Cvc
MI B	1111	Lys	340	Olu	110	oru	261	345	Leu	nsp	nsp	Met	350	1111	Cys
Sor	Gln	110		Tyr	Aen	Tyr	Aen		Glu	lve	Thr	lve	Lys	Asn	Ser
561	Olli	355	, 01	.,.	71511	1 9 1	360	,,,	oru	Ljo	1111	365	Lyb	пор	561
Glv	Trn		Thr	Ala	lle	Cvs		Asp	Tvr	Cvs	Pro		Met	Tvr	Glu
O1,	370	0				375			.,_		380			- , -	
Glu		Glu	Thr	Leu	Ala		Val	Leu	Gln	Ser		He	Gly	Gln	Asp
385					390				•	395	- 1-				400
	Arg	Val	His	Asn		Thr	Phe	Leu	Arg		Пе	Pro	Phe	Val	
	9			405					410					415	

Ser	Leu	Met	Asp	Leu	Lys	Asp	Leu	Gly	Val	Ala	Tyr	He	Ala	Gln	Val
			420					425					430		
Val	Asn	His	Leu	Tyr	Ser	Glu	Val	Lys	Glu	Val	Leu	Asn	Gln	Thr	Asp
		435					440					445			
Ala	Val	Cys	Asp	Lys	Val	Thr	Glu	Phe	Phe	Leu	Leu	He	Leu	Val	Ser
	450					455					460				
Val	He	Glu	Leu	His	Arg	Asn	Lys	Lys	Cys	Leu	His	Leu	Leu	Trp	Val
465					470					475					480
Ser	Ser	Gln	Gln	Trp	Val	Glu	Ala	Val	Val	Lys	Cys	Ala	Lys	Leu	Pro
				485					490					495	
Thr	Thr	Ala	Phe	Thr	Arg	Ser	Ser	Glu	Lys	Ser	Ser	Gly	Asn	Cys	Ser
			500					505					510		
Lys	Gly	Thr	Ala	Met	He	Ser	Ser	Leu	Ser	Leu	His	Ser	Met	Pro	Ser
		515					520					525			
Asn	Ser	Val	Gln	Leu	Ala	Tyr	Val	Gln	Leu	lle	Arg	Ser	Leu	Leu	Lys
	530					535					540				
G] u	Gly	Tyr	Gln	Leu	Gly	Gln	Gln	Ser	Leu	Cys	Lys	Arg	Phe	Trp	Asp
545					550					555					560
Lys	Leu	Asn	Leu	Phe	Leu	Arg	Gly	Asn	Leu	Ser	Leu	Gly	Trp	Gln	Leu
				565					570					575	
Thr	Ser	Gln	Glu	Thr	His	Glu	Leu	Gln	Ser	Cys	Leu	Lys	Gln	He	He
			580					585					590		
Arg	Asn	He	Lys	Phe	Lys	Ala	Pro	Pro	Cys	Asn	Thr	Phe	Val	Asp	Leu
		595					600					605			
Thr	Ser	Ala	Cys	Lys	Ile	Ser	Pro	Ala	Ser	Tyr	Asn	Lys	Glu	Glu	Ser
	610					615					620				
Ser	Leu	Ser	Ser	Phe	Asn	lle	Ser	Tyr	Phe	Lys					
625					630					635					

<210> 3314

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3314 Met Gln Gly Lys Cys Phe Ser Arg Thr Ser Leu Leu Ser Lys Gly Thr 10 Gln Gln Ser Gly Cys Thr Leu Cys Asp Leu Pro Ser Gln His Val Pro 25 30 20 Pro Leu Ser Pro Arg Arg Glu Arg Gln Glu Arg Val Phe Thr Val Ser 40 Val Ser Leu Ser His Gln Ala Gly Val Gln Trp Pro Asp Leu Gly Ser 60 50 55 Leu His Pro Leu Thr Pro Trp Phe Lys Gln Phe Ser Cys Leu Ser Leu 70 75 Pro Arg Ser Trp Asp Ser Arg His Ala Pro Pro Leu Pro Ala Asn Phe 90 Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser 100 105 110

<210> 3315

Leu Ser

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3315

Met Val Leu Asp Lys Arg Ala Gly Lys Lys Arg Ala Ala Arg Gly Gly
1 5 10 15

Phe Cys Pro Arg Arg Pro Gln Ala Gly Gly Pro His Gly Leu Cys Pro 20 25 30

Asp Val Leu Leu His Pro Ala Ala Pro Thr Thr Glu Thr Ala Pro
35 40 45

Gly Glu Gly Thr Thr Leu Ser Thr Gly Gln Pro Val Ser Pro Gly Arg
50 55 60

Leu Leu Ala His His Ser Trp Gly Pro Glu Glu Ala Pro Ala Gly Gly
65 70 75 80

Gly Ser Gly Pro Gly Leu Ser Leu Ser Leu His Thr Asp Trp Ser Pro

90 Ala Leu Ser Pro Thr Gly Thr Leu Arg Gly Asn Phe Ser Lys Val Leu 105 Trp Gly Gln Arg Glu Val Val Glu Pro Ala Arg Leu Trp Glu Ala Pro 120 Glu Lys Leu Pro Leu Pro Thr Ser Val Leu Ala Gly Phe Gly Pro Trp 135 Ala Gly Pro Pro Gln Ala Pro Lys Gly Lys Val Val Gln Gly Lys Ala 145 150 155 160 Leu Glu Ala Ala Gly Ile Arg Val Gly His Thr Glu Gly Tyr Gln Val 165 170 Leu Trp Gly Pro Trp Gly Pro Ala Leu Glu Ala Asp Arg Ser Thr Gly 180 185 Leu Arg Met Ser Cys Cys Pro Arg Thr Trp Trp Ser Gly Pro Gly Arg 195 200 205 Ala Ala Pro Pro Pro Pro Ile Pro His Leu Val Ile Thr 210 215 220

<210> 3316

⟨211⟩ 256

<212> PRT

<213> Homo sapiens

<400> 3316

 Met Gly Cys Ala Arg Arg His Ala Gly Pro Arg Gly Ser Pro Val Lys

 1
 5
 10
 15

 Gly Ser Gly Gly Leu Asp Ser Leu Trp Ala Trp Gly Gly Val Val Ser
 20
 25
 30

 Leu Cys Trp Leu Ser Tyr Arg Trp Trp Pro Val Ser Pro Gly Ser Gly
 35
 40
 45

 Cys Ser His Val Pro Ala Pro Ala Pro Thr Leu Pro Ala Arg Asp Arg Pro His
 50
 55
 60

 Gln Asp Pro Gly Ala Ala Pro Ala Ser Ala Arg Leu Ser Pro Arg Ser
 65
 70
 75
 80

Gln Val Arg Pro Gln Pro Leu Arg His Ala Ser Gly Ser Ser Cys Cys

				85					90					95	
Thr	Cys	Ser	Ser	Pro	Cys	Ala	Ser	Thr	Leu	Leu	Ser	Gly	Phe	Leu	Pro
			100					105					110		
Leu	Ala	Thr	Gly	Arg	Val	Cys	Val	Lys	Pro	Gln	Gly	Leu	Gln	Lys	Leu
		115					120					125			
Glu	Val	Pro	Leu	Ser	Gly	Arg	lle	Met	His	Cys	Thr	Arg	Gly	lle	Lys
	130					135					140				
Gly	Gly	Asp	Arg	Lys	Asn	Tyr	Gly	Cys	Cys	Asp	Thr	Ser	Pro	Thr	Ala
145					150					155					160
Pro	Arg	Leu	Ala	Ala	Thr	Ala	Thr	Arg	Arg	Asp	Phe	Ser	Val	Ala	Ser
				165					170					175	
Arg	Gly	Val	Gly	Gln	Arg	Trp	Ser	Leu	Val	Thr	Phe	Ser	Leu	Gly	Pro
			180					185					190		
Ala	Pro	Gly	Leu	Ser	Ser	Leu	Gly	Asn	Ser	Thr	Ser	Leu	Ser	Thr	Pro
		195					200					205			
Leu	Glu	Gly	Leu	Thr	Met	Arg	Gly	Ala	Gln	Thr	Gly	Gly	He	Thr	Thr
	210.					215					220				
Trp	Phe	Gly	Leu	Tyr	His	Ser	Pro	Arg	Asp	Lys	Ala	Arg	Gln	Thr	Pro
225					230					235					240
Leu	His	He	Arg	Ser	Glu	Phe	G] u	Leu	Trp	Leu	His	Asp	Thr	Asp	Thr
				245					250					255	

<210> 3317

<211> 639

<212> PRT

<213> Homo sapiens

<400> 3317

50					55					60				
Gln	Gly	Glu	Val	Pro	Trp	Gly	Glu	Glu	Arg	Arg	Arg	Arg	Pro	Gly
				70					75					80
Cys	Лlа	Gly	He	Tyr	Ala	Glu	His	Val	Leu	Arg	Pro	Lys	Asn	Leu
			85					90					95	
Leu	Ala	His	Gln	Arg	Gln	Gln	Gln	Leu	Gln	Phe	Ser	Asp	Gln	Ser
		100					105					110		
Gln	Ser	Asp	Thr	Ala	Glu	Gly	Gln	Glu	Lys	Glu	Lys	Ser	Thr	Lys
	115					120					125			
Met	Ala	Phe	Ser	Ser	Pro	Pro	Leu	Arg	His	Ala	Val	Ser	Ser	Arg
130					135					140				
Arg	Asn	Ser	Val	Val	Glu	lle	G]u	Ser	Ser	Gln	Gly	Gln	Arg	Glu
				150					155					160
Pro	Thr	Glu	Пе	Asp	Lys	Val	Leu	Lys	Gly	11e	Glu	Asn	Ser	Arg
			165					170					175	
Gly	Ala	Phe	Lys	Cys	Ala	Glu	Arg	Gly	Gln	Asp	Phe	Ser	Arg	Lys
		180					185					190		
Met	Val	Ile	He	His	Lys	Lys	Ala	His	Ser	Arg	Gln	Lys	Leu	Phe
	195					200					205			
Cys	Arg	Glu	Cys	His		Gly	Phe	Arg	Asp	Glu	Ser	Ala	Leu	Leu
210					215					220				
His	Gln	Asn	Thr	His	Thr	Gly	Glu	Lys	Ser	Tyr	Val	Cys	Ser	
				230					235					240
Gly	Arg	Gly		Ser	Leu	Lys	Ala		Leu	Leu	Arg	His		Arg
	_													
His	Ser		Glu	Lys	Pro	Phe			Lys	Val	Cys			Gly
TC1			6	Tr.		æı.			C1		TO I	2.0		6.1
Ihr		Lys	Ser	lyr	Leu		Val	His	Glu	Arg		HIS	Ihr	ыу
,		T	C1	C	C I		C	C1						
	Pro	Tyr	610	Cys		Glu	Cys	GIY	Arg		rne	Asn	Asp	Lys
	Т	1	1	u.		1	۸1	и:	C a 24		C1	1	Duna	DL a
261.	IVF	ASN	Lys		Leu	Lys	Ala	HIS		бту	GIU	Lys	rro	
				310					919					320
Cve	lve	Glo	Cve	Glv	Ara	C1 v	Tur	The	Acr	lve	Sor	Tyr	Pho	Va1
Cya	r. i.o.	GIU		Олу	ni g	Олу	1 3 1.		11011	1. y 3	061	1 9.3		, 01
	Gln Cys Leu Gln Met 130 Arg Pro Gly Met Cys 210 His Gly His Thr Lys 290 Ser	Gln Gly Cys Ala Leu Ala Gln Ser 115 Met Ala 130 Asn Pro Thr Gly Ala Met Val 195 Cys Arg 210 Arg 210 Arg His Gln Gly Arg Thr Ser 275 Lys Pro 290 Fro	Gln Gly Glu Cys Ala Gly Leu Ala His 100 Gln Ser Asp 115 Met Ala Phe 130 Arg Asn Ser Pro Thr Glu Gly Ala Phe 180 Met Val Ile 195 Cys Arg Glu 210 His Gln Asn Gly Arg Gly His Ser Gly 260 Thr Ser Lys 275 Lys Pro Tyr 290 Ser Tyr Asn	Gln Gly Val Cys Ala Gly Ile 85 Leu Ala His Gln 100 In In Gln Ser Asp Thr Met Ala Phe Ser 130 Asn Ser Val Pro Thr Glu Ile 165 Gly Ala Phe Lys 180 His Ile Ile 11e 195 Cys Thr Cys 210 Cys Thr Thr Gly Arg Gly Phe 245 Arg Gly Phe 245 Arg Gly Gly His Ser Lys Ser Lys Pro Tyr Glu 290 Tyr Asn Lys Ser Tyr Asn Lys	Glin Gly Val Pro 70 Cys Ala Gly Ile Tyr 85 Leu Ala His Gln Arg Leu Ala His Gln Arg Gln Ser Ala Ala 115 Arg Ser Met Ala Phe Ser Ser Asp As	Glu Clu Pro Trp Cys Ala Gly He Tyr Ala Cys Ala Gly He Tyr Ala Reu Ala His Gln Arg Gln Gln Ser Ass Tyr Ala Glu Arg Ass Ser Ser Pro 135 Arg Ass Ser Val Glu Glu Arg Ala His Ass Lys Ala Ala Phe Lys Cys Ala Arg Ala His Ala Ala Arg Ala Ala Ala Ala Ala Arg Ala Ala Ala Ala Ala Ala Arg Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala	Gling Gling Valid From Top Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling Cling<	Glu Glu Val Pro Trp Gly Glu His Cys Ala Gly 11e Tyr Ala Glu His Leu Ala His Gln Arg Gln Gln Gln Gln 100	Glu Glu Val Pro Trp Glu Glu Glu Val Cys Ala Gly 11e Tyr Ala His Val Res Ino I	Glu Glu Val Pro Trp Glu Glu Glu Arg Cys Ala Glu Ile Tyr Ala Glu Wal Leu 75 Cys Ala His Glu Ile Tyr Ala Glu Glu Val Leu Glu Gu Ala His Glu Arg Glu Glu Glu Leu Glu Glu Ser Asp Thr Ala Glu Glu Glu Glu Lys His 133 Ile Ile Ser Pro Pro Leu Arg His Arg Asp Val Glu Glu Ile Ile	Glu Glu Val Pro Trp Glu Glu Glu Arg Glu His Gu Arg Arg Glu His Gu Arg Arg Glu Glu His Gu Pro Dro Ju Leu Gu Pro Arg His Arg Arg Arg Gu Arg Arg	Glu Glu Val Pro Trp Glu Glu Glu Arg Glu Glu <td>Glu Glu Val Pro Tro Glu Glu Arg Glu His Val Leu Arg Pro Lys Cys Ala His Glu Arg Glu Glu Glu Leu Arg Pro Arg Arg</td> <td>Classes of the control of th</td>	Glu Glu Val Pro Tro Glu Glu Arg Glu His Val Leu Arg Pro Lys Cys Ala His Glu Arg Glu Glu Glu Leu Arg Pro Arg Arg	Classes of the control of th

Val	His	Lys	Arg	Ile	His	Ser	Gly	Glu	Lys	Pro	Tyr	Arg	Cys	Gln	Glu
			340					345					350		
Cys	Gly	Arg	Gly	Phe	Ser	Asn	Lys	Ser	His	Leu	He	Thr	His	Gln	Arg
		355					360					365			
Thr	His	Ser	Gly	Glu	Lys	Pro	Phe	Ala	Cys	Arg	Gln	Cys	Lys	Gln	Ser
	370					375					380				
Phe	Ser	Val	Lys	Gly	Ser	Leu	Leu	Arg	His	Gln	Arg	Thr	His	Ser	Gly
385					390					395					400
Glu	Lys	Pro	Phe	Val	Cys	Lys	Asp	Cys	Glu	Arg	Ser	Phe	Ser	Gln	Lys
				405					410					415	
Ser	Thr	Leu	Val	Tyr	His	Gln	Arg	Thr	His	Ser	Gly	Glu	Lys	Pro	Phe
			420					425					430		
Val	Cys	Arg	Glu	Cys	Gly	Gln	Gly	Phe	He	Gln	Lys	Ser	Thr	Leu	Val
		435					440					445			
Lys	His	Gln	lle	Thr	His	Ser	Glu	Glu	Lys	Pro	Phe	Val	Cys	Lys	Asp
	450					455					460				
Cys	Gly	Arg	Gly	Phe	Ile	Gln	Lys	Ser	Thr	Phe	Thr	Leu	His	Gln	Arg
465					470					475					480
Thr	His	Ser	Glu	Glu	Lys	Pro	Tyr	Gly	Cys	Arg	Glu	Cys	Gly	Arg	Arg
				485					490					495	
Phe	Arg	Asp	Lys	Ser	Ser	Tyr	Asn	Lys	His	Leu	Arg	Ala	His	Leu	Gly
			500					505					510		
Glu	Lys	Arg	Phe	Phe	Cys	Arg	Asp	Cys	Gly	Arg	Gly	Phe	Thr	Leu	Lys
		515					520					525			
Pro	Asn	Leu	Thr	lle	His	Gln	Arg	Thr	His	Ser	Gly	Glu	Lys	Pro	Phe
	530					535					540				
Val	Cys	Asn	Val	Cys	Gly	Gln	Gly	Phe	Ser	Trp	Lys	Arg	Ser	Leu	Thr
545					550					555					560
Arg	His	His	Trp	Arg	He	His	Ser	Lys	Glu	Lys	Pro	Phe	Val	Cys	Gln
				565					570					575	
Glu	Cys	Lys	Arg	G1y	Tyr	Thr	Ser	Lys	Ser	Asp	Leu	Thr	Val	His	Glu
			580					585					590		
Arg	Пе	His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Gln	Glu	Cys	Gly	Arg
		595					600					605			
Lys	Phe	Ser	Asn	Lys	Ser	Tyr	Tyr	Ser	Lys	His	Leu	Lys	Arg	His	Leu
	610					615					620				

Arg Glu Lys Arg Phe Cys Thr Gly Ser Val Gly Glu Ala Ser Ser 625 630 635

<210> 3318

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3318

Met Thr Ser Trp Ile Pro Leu Met Pro Gly Asp Ser Ala Asp Leu Phe
1 5 10 15

Gly Asp Gly Thr Thr Glu Asp Gly Ser Ala Ala Asn Gly Arg Leu Trp
20 25 30

Arg Thr Val lle lle Gly Glu Gln Glu His Arg Ile Asp Leu His Met
35 40 45

Ile Arg Pro Tyr Met Lys Val Val Thr His Gly Gly Tyr Tyr Gly Glu
50 55 60

Gly Leu Asn Ala Ile Ile Val Phe Ala Ala Cys Phe Leu Pro Asp Ser 65 70 75 80

Ser Leu Pro Asp Tyr His Tyr 11e Met Glu Asn Leu Phe Leu Tyr Val 85 90 95

lle Ser Ser Leu Glu Leu Leu Val Ala Glu Asp Tyr Met Ile Val Tyr
100 105 110

Leu Asn Gly Ala Thr Pro Arg Arg Met Pro Gly Ile Gly Trp Leu 115 120 125

Lys Lys Cys Tyr Gln Met Ile Gly Arg Arg Leu Arg Lys Asn Leu Lys 130 135 140

Ser Leu Ile Ile Val His Pro Ser Trp Phe Ile Arg Thr Val Leu Ala 145 150 155 160

Ile Ser Arg Pro Phe Ile Ser Val Lys Phe Ile Asn Lys Ile Gln Tyr 165 170 175

Val His Ser Leu Glu Asp Leu Glu Gln Leu lle Pro Met Glu His Val 180 185 190

Gln Ile Pro Asp Cys Val Leu Gln Tyr Glu Glu Glu Arg Leu Lys Ala 195 200 205

 Arg Arg Glu Ser Ala Arg Pro Gln Pro Glu Phe Val Leu Pro Arg Ser

 210
 215
 220

 Glu Glu Lys Pro Glu Val Ala Pro Val Glu Asn Arg Ser Ala Leu Val

 225
 230
 235

 Ser Glu Asp Gln Glu Thr Ser Met Ser

 245

<210> 3319

<211> 959

<212> PRT

<213> Homo sapiens

<400> 3319

Met Ala Pro Tyr Gln Gly Pro Ala Leu Tyr Val Tyr Asn Asn Ala Val

1 5 10 15

Phe Thr Pro Glu Asp Trp His Gly 11e Gln Glu 11e Ala Arg Ser Arg
20 25 30

Lys Lys Asp Asp Pro Leu Lys Val Gly Arg Phe Gly Ile Gly Phe Asn 35 40 45

Ser Val Tyr His lle Thr Asp Val Pro Cys lle Phe Ser Gly Asp Gln 50 55 60

11e Gly Met Leu Asp Pro His Gln Thr Leu Phe Gly Pro His Glu Ser 65 70 75 80

Gly Gln Cys Trp Asn Leu Lys Asp Asp Ser Lys Glu 11e Ser Glu Leu 85 90 95

Ser Asp Gln Phe Ala Pro Phe Val Gly Ile Phe Gly Ser Thr Lys Glu 100 105 110

Thr Phe Ile Asn Gly Asn Phe Pro Gly Thr Phe Phe Arg Phe Pro Leu
115 120 125

Arg Leu Gln Pro Ser Gln Leu Ser Ser Asn Leu Tyr Asn Lys Gln Lys 130 135 140

Val Leu Glu Leu Phe Glu Ser Phe Arg Ala Asp Ala Asp Thr Val Leu 145 150 155 160

Leu Phe Leu Lys Ser Val Gln Asp Val Ser Leu Tyr Val Arg Glu Ala

165 170 175

Asp	Gly	Thr	Glu	Lys	Leu	Val	Phe	Arg	Val	Thr	Ser	Ser	Glu	Ser	Lys
			180					185					190		
Ala	Leu	Lys	His	Glu	Arg	Pro	Asn	Ser	He	Lys	He	Leu	G] y	Thr	Аlа
		195					200					205			
He	Ser	Asn	Tyr	Cys	Lys	Lys	Thr	Pro	Ser	Asn	Asn	11e	Thr	Cys	Val
	210					215					220				
Thr	Tyr	His	Val	Asn	He	Val	Leu	G] u	Glu	Glu	Ser	Thr	Lys	Asp	Ala
225					230					235					240
Gln	Lys	Thr	Ser	Trp	Leu	Val	Cys	Asn	Ser	Val	Gly	Gly	Arg	Gly	lle
				245					250					255	
Ser	Ser	Lys	Leu	Asp	Ser	Leu	Ala	Asp	Glu	Leu	Lys	Phe	Val	Pro	11e
			260					265					270		
He	Gly	He	Ala	Met	Pro	Leu	Ser	Ser	Arg	Asp	Asp	Glu	Ala	Lys	Gly
		275					280					285			
Ala	Thr	Ser	Asp	Phe	Ser	G1 y	Lys	Ala	Phe	Cys	Phe	Leu	Pro	Leu	Pro
	290					295					300				
Pro	Gly	Glu	Glu	Ser	Ser	Thr	Gly	Leu	Pro		His	He	Ser	Gly	
305					310					315					320
Phe	Gly	Leu	Thr		Asn	Arg	Arg	Ser		Lys	Trp	Arg	Glu		Asp
	_			325				_	330					335	
GIn	Trp	Arg		Pro	Ala	Ala	Leu		Asn	G] u	Phe	Leu		Met	Asn
			340				m.	345					350		
Val	Val		Lys	Ala	lyr	Ala		Leu	He	Leu	Asp		He	Lys	Arg
	61	355	61	,	C	C	360	DI	D		C	365		32)	
Leu		Met	Glu	Lys	Ser		Asp	Phe	Pro	Leu	Ser	vai	Asp	val	116
Т	370	1	Т	Dana	C1	375	C	1	V 1	Luc	380	u; a	Т	C1s	Due
	Lys	Leu	1.rp	Fro	390	на	ser	Lys	vai	395	Val	nis	пр	GIN	400
385	Lou	Clu	Б						_	393			17 1	11	
vai				1	Ðbo	Can	C1	1 ~	1 011	C1n	Acre	A 1 a			
	Leu	Old	Pro		Phe	Ser	Glu	Leu		Gln	Asn	Ala	val		iyr
Sor				405					410					415	
Ser			Cys	405				Leu	410		Asn Val		Phe	415	
	lle	Ser	Cys 420	405 Asp	Trp	Val	Arg	Leu 425	410 Glu	Gln	Val	Tyr	Phe 430	415 Ser	Glu
	lle	Ser Glu	Cys 420	405 Asp	Trp	Val	Arg Thr	Leu 425	410 Glu	Gln		Tyr Asn	Phe 430	415 Ser	Glu
Leu	lle Asp	Ser Glu 435	Cys 420 Asn	405 Asp Leu	Trp Glu	Val Tyr	Arg Thr 440	Leu 425 Lys	410 Glu Thr	Gln Val	Val	Tyr Asn 445	Phe 430 Tyr	415 Ser Leu	Glu Gln

Val	Gln	Leu	Thr	Ala	Ala	Ser	Gly	Thr	Thr	Pro	Val	Arg	Lys	Val	Thr
465					470					475					480
Pro	Ala	Trp	Val	Arg	Gln	Val	Leu	Arg	Lys	Cys	Ala	His	Leu	G]y	Cys
				485					490					495	
Ala	Glu	Glu	Lys	Leu	His	Leu	Leu	G1u	Phe	Val	Leu	Ser	Asp	Gln	Ala
			500					505					510		
Tyr	Ser	Glu	Leu	Leu	Gly	Leu	Glu	Leu	Leu	Pro	Leu	Gln	Asn	Gly	Asn
		515					520					525			
Phe	Val	Pro	Phe	Ser	Ser	Ser	Val	Ser	Asp	Gln	Asp	Val	He	Tyr	He
	530					535					540				
Thr	Ser	Ala	Glu	Tyr	Pro	Arg	Ser	Leu	Phe	Pro	Ser	Leu	Glu	Gly	
545					550					555					560
Phe	He	Leu	Asp		Leu	Lys	Pro	His		Val	Ala	Ala	Leu		Glu
				565					570		_		_	575	
Ala	Ala	Gln		Arg	Gly	Arg	Pro	-	Thr	Gln	Leu	Gln		Leu	Asn
D	0.1		580	4.7				585	C1	17 1			590	D)	T
Pro	Glu	_	Phe	Ala	Arg	Leu		Lys	Glu	Val	Met		Ihr	Phe	Irp
n	C1	595	C1		7.1	17 1	600	т.	т.	D	DI .	605	C1	A	۸.
rro		Arg	GIU	Leu	116	Val	GIN	irp	lyr	Pro	620	ASP	Glu	ASH	Arg
Acn	610	Dro	Sor	Vol.	Sor	615 Trp	Lou	Lvc	Mot	Val		lve	Acn	Lou	Tur
625	1115	110	261	vai	630	11 þ	Leu	Lys	met	635	пр	Lys	ды	Leu	640
	His	Phe	Ser	Glu		Leu	Thr	Leu	Phe		Glu	Met	Pro	Len	
110	1113	THE	501	645	пор	1,cu	1111	Lea	650	пор	0.14	,no c	110	655	110
Pro	Arg	Thr	He		Glu	Glu	Glv	Gln		Cvs	Val	Glu	l.eu		Arg
	0		660			_	,	665					670		
Leu	Arg	He	Pro	Ser	Leu	Val	He	Leu	Asp	Asp	Glu	Ser	Glu	Ala	G1n
		675					680					685			
Leu	Pro	Glu	Phe	Leu	Ala	Asp	He	Va]	Gln	Lys	Leu	G1 y	G] y	Phe	Val
	690					695					700				
Leu	Lys	Lys	Leu	Asp	Ala	Ser	He	Gln	His	Pro	Leu	He	Lys	Lys	Tyr
705					710					715					720
11e	His	Ser	Pro	Leu	Pro	Ser	Ala	Va]	Leu	Gln	He	Met	Glu	Lys	Met
				725					730					735	
Pro	Leu	Gln	Lys	Leu	Cys	Asn	Gln	He	Thr	Ser	Leu	Leu	Pro	Thr	His
			740					745					750		

Lys Asp Ala Leu Arg Lys Phe Leu Ala Ser Leu Thr Asp Ser Ser Glu Lys Glu Lys Arg lle Ile Gln Glu Leu Ala Ile Phe Lys Arg Ile Asn His Ser Ser Asp Gln Gly Ile Ser Ser Tyr Thr Lys Leu Lys Gly Cys Lys Val Leu His His Thr Ala Lys Leu Pro Ala Asp Leu Arg Leu Ser Ile Ser Val Ile Asp Ser Ser Asp Glu Ala Thr Ile Arg Leu Ala Asn Met Leu Lys Ile Glu Gln Leu Lys Thr Thr Ser Cys Leu Lys Leu Val Leu Lys Asp Ile Glu Asn Ala Phe Tyr Ser His Glu Glu Val Thr Gln Leu Met Leu Trp Val Leu Glu Asn Leu Ser Ser Leu Lys Asn Glu Asn Pro Asn Val Leu Glu Trp Leu Thr Pro Leu Lys Phe Ile Gln Ile Ser Gln Glu Gln Met Val Ser Ala Gly Glu Leu Phe Asp Pro Asp Ile Glu Val Leu Lys Asp Leu Phe Cys Asn Glu Glu Gly Thr Tyr Phe Pro Pro Ser Val Phe Thr Ser Pro Asp 11e Leu His Ser Leu Arg Gln 11e Gly Leu Lys Asn Glu Ala Ser Leu Lys Glu Lys Asp Val Val Gln Val

<210> 3320

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3320

Met Gly Ser Ala Leu Gly Thr Ala Gly Ser Trp Ala Gln Lys Gly Gly

10 Thr Lys Val Cys Val Gln His Gln Glu Gln Gln Ala Ala Gly His Lys 25 Arg Glu Val Leu Gly Met Trp Val Gln His Gln Gly Gln Arg Ser Thr 40 Lys Gly Lys Arg Cys Gly Tyr Glu Phe Ser Thr Lys Asp Ser Gly Gln 55 Leu Ile Leu Ala Gly Val Leu Gly Met His Phe Arg His Glu Tyr Gln 65 70 75 80 Leu Pro Arg Pro Gly Thr Val Val His Ala Leu Ile Pro Ala Leu Trp 85 90 Glu Ala Lys Ala Asp Gly Ser Arg Gly Gln Gln Phe Glu Thr Ser Leu 100 105 110 Ala Asn Ile Val Lys Leu Cys Leu Tyr 115 120

<210> 3321

<211> 1268

<212> PRT

<213> Homo sapiens

<400> 3321

Met Arg Glu Leu Glu Met Ser Arg Thr Asn Thr Glu Asn Ile Glu Thr

1 5 10 15

Ser Thr Glu Thr Ala Glu Ser Ser Ser Glu Ser Leu Ser Ser Leu Glu 20 25 30

Gln Leu Asp Leu Leu Phe Glu Lys Glu Gln Gly Ala Val Arg Lys Ala 35 40 45

Gly Trp Leu Phe Phe Lys Pro Leu Val Thr Val Gln Lys Glu Arg Lys 50 55 60

Leu Glu Leu Val Ala Arg Arg Lys Trp Lys Gln Tyr Trp Val Thr Leu
65 70 75 80

Lys Gly Cys Thr Leu Leu Phe Tyr Glu Thr Tyr Gly Lys Asn Ser Met 85 90 95

Asp Gln Ser Ser Ala Pro Arg Cys Ala Leu Phe Ala Glu Asp Ser Ile

			100					105					110		
Val	Gln	Ser	Val	Pro	Glu	His	Pro	Lys	Lys	Glu	Asn	Val	Phe	Cys	Leu
		115					120					125			
Ser	Asn	Ser	Phe	Gly	Asp	Val	Tyr	Leu	Phe	Gln	Ala	Thr	Ser	Gln	Thr
	130					135					140				
Лsp	Leu	Glu	Asn	Trp	Val	Thr	Ala	Val	His	Ser	Ala	Cys	Ala	Ser	Leu
145					150					155					160
Phe	Ala	Lys	Lys	His	Gly	Lys	Glu	Asp	Thr	Leu	Arg	Leu	Leu	Lys	Asn
				165					170					175	
Gln	Thr	Lys	Asn	Leu	Leu	Gln	Lys	Ile	Asp	Met	Asp	Ser	Lys	Met	Lys
			180					185					190		
Lys	Met	Ala	Glu	Leu	Gln	Leu	Ser	Val	Val	Ser	Asp	Pro	Lys	Asn	Arg
		195					200					205			
Lys	Ala	He	Glu	Asn	Gln	He	Gln	Gln	Trp	Glu	Gln	Asn	Leu	Glu	Lys
	210					215					220				
Phe	His	Met	Asp	Leu	Phe	Arg	Met	Arg	Cys	Tyr	Leu	Ala	Ser	Leu	Gln
225					230					235					240
Gly	Gly	Glu	Leu	Pro	Asn	Pro	Lys	Ser	Leu	Leu	Ala	Ala	Ala	Ser	Arg
				245					250					255	
Pro	Ser	Lys	Leu	Ala	Leu	Gly	Arg	Leu	Gly	He	Leu	Ser	Val	Ser	Ser
			260					265					270		
Phe	His	Ala	Leu	Val	Cys	Ser	Arg	Asp	Asp	Ser	Ala	Leu	Arg	Lys	Arg
		275					280					285			
Thr	Leu	Ser	Leu	Thr	Gln	Arg	Gly	Arg	Asn	Lys	Lys	Gly	He	Phe	Ser
	290					295					300				
Ser	Leu	Lys	Gly	Leu	Asp	Thr	Leu	Ala	Arg	Lys	Gly	Lys	Glu	Lys	Arg
305					310					315					320
Pro	Ser	He	Thr	G]n	Val	Asp	Glu	Leu		His	lle	Tyr	Gly		Thr
				325					330					335	
Val	Asp	Gly		Pro	Arg	Asp	Asn		Trp	Glu	He	Gln	Thr	Tyr	Val
			340					345					350		
His	Phe		Asp	Asn	His	Gly		Thr	Va]	Gly	lle		Pro	Glu	His
		355					360					365			
Arg		Glu	Asp	He	Leu		Leu	Ala	Cys	Lys		Arg	Gln	Leu	Glu
15	370				_	375					380				
Pro	Ser	His	Lvr	GLv	l en	Gln	Leu	Arσ	l v s	len	Val	Asp	Asp	Asn	Val

385					390					395					400
Glu	Tyr	Cys	Ile	Pro	Ala	Pro	Tyr	Glu	Tyr	Met	Gln	Gln	Gln	Val	Tyr
				405					410					415	
Asp	Glu	He	Glu	Val	Phe	Pro	Leu	Asn	Val	Tyr	Asp	Val	Gln	Leu	Thr
			420					425					430		
Lys	Thr	Gly	Ser	Val	Cys	Asp	Phe	Gly	Phe	Ala	Val	Thr	Ala	Gln	Val
		435					440					445			
Asp	Glu	Arg	Gln	His	Leu	Ser	Arg	lle	Phe	Ile	Ser	Asp	Val	Leu	Pro
	450					455					460				
Asp	Gly	Leu	Ala	Tyr	Gly	Glu	Gly	Leu	Arg	Lys	Gly	Asn	Glu	lle	Met
465					470					475					480
Thr	Leu	Asn	Gly	Glu	Ala	Val	Ser	Asp	Leu	Asp	Leu	Lys	Gln	Met	G1u
				485					490					495	
Ala	Leu	Phe	Ser	Glu	Lys	Ser	Va]	Gly	Leu	Thr	Leu	lle	Ala	Arg	Pro
			500					505					510		
Pro	Asp	Thr	Lys	Ala	Thr	Leu	Cys	Thr	Ser	Trp	Ser	Asp	Ser	Asp	Leu
		515					520					525			
Phe	Ser	Arg	Asp	Gln	Lys	Ser	Leu	Leu	Pro	Pro	Pro	Asn	Gln	Ser	Gln
	530					535					540				
Leu	Leu	Glu	Glu	Phe	Leu	Asp	Asn	Phe	Lys	Lys	Asn	Thr	Ala	Asn	Asp
545					550					555					560
Phe	Ser	Asn	Val	Pro	Asp	He	Thr	Thr	Gly	Leu	Lys	Arg	Ser	Gln	Thr
				565					570					575	
Asp	Gly	Thr	Leu	Asp	Gln	Val	Ser	His	Arg	Glu	Lys	Met	Glu	Gln	Thr
			580					585					590		
Phe	Arg	Ser	Ala	Glu	Gln	Πe	Thr	Ala	Leu	Cys	Lys	Ser	Phe	Asn	Asp
		595					600					605			
Ser	Gln	Ala	Asn	Gly	Met	Glu	Gly	Pro	Arg	Glu	Asn	Gln	Asp	Pro	Pro
	610					615					620				
Pro	Arg	Pro	Leu	Ala	Arg	His	Leu	Ser	Asp	Ala	Asp	Arg	Leu	Arg	Lys
625					630					635					640
Val	He	Gln	Glu	Leu	Val	Asp	Thr	Glu	Lys	Ser	Tyr	Val	Lys	Asp	Leu
				645					650					655	
Ser	Cys	Leu	Phe	Glu	Leu	Tyr	Leu	Glu	Pro	Leu	Gln	Asn	Glu	Thr	Phe
			660					665					670		
Leu	Thr	Gln	Asp	G1u	Met	61u	Ser	Leu	Phe	Gly	Ser	Leu	Pro	Glu	Met

		675					680					685			
Leu	Glu	Phe	Gln	Lys	Val	Phe	Leu	Glu	Thr	Leu	Glu	Asp	Gly	He	Ser
	690					695					700				
Ala	Ser	Ser	Asp	Phe	Asn	Thr	Leu	Glu	Thr	Pro	Ser	Gln	Phe	Arg	Lys
705					710					715					720
Leu	Leu	Phe	Pro	Leu	Gly	Gly	Ser	Phe	Leu	Tyr	Tyr	Ala	Asp	His	Phe
				725					730					735	
Lys	Leu	Tyr	Ser	Gly	Phe	Cys	Ala	Asn	His	Ile	Lys	Val	Gln	Lys	Val
			740					745					750		
Leu	Glu	Arg	Ala	Lys	Thr	Asp	Lys	Ala	Phe	Lys	Ala	Phe	Leu	Asp	Ala
		755					760					765			
Arg	Asn	Pro	Thr	Lys	Gln	His	Ser	Ser	Thr	Leu	Glu	Ser	Tyr	Leu	lle
	770					775					780				
Lys	Pro	Val	Gln	Arg	Val	Leu	Lys	Tyr	Pro	Leu	Leu	Leu	Lys	Glu	Leu
785					790					795					800
Val	Ser	Leu	Thr	Asp	Gln	Glu	Ser	G]u	Glu	His	Tyr	His	Leu	Thr	G1 u
				805					810					815	
Ala	Leu	Lys	Ala	Met	Glu	Lys	Val		Ser	His	Ile	Asn	Glu	Met	Gln
			820					825					830		
Lys	He		Glu	Asp	Tyr	Gly		Val	Phe	Asp	Arg		Val	Ala	G1 u
	_	835					840					845			
Gln		G1 y	Thr	Glu	Lys	Glu	G1n	Pro	G] u	Trp		Ser	Glu	Val	Met
	850	,		10		855			m.,		860	m .			
	Val	Leu	Asp	Pro		G1 y	Lys	Leu	Ihr		Gly	Ihr	Leu	Glu	
865 D	A	ть	1	V . 1	870	C1		C	14 .	875	C1	,		14 .	880
Pro	Arg	Inr	Leu		inr	Glu	Leu	ser		GIy	Glu	Leu	Leu		HIS
Can	Tha	Va1	Con	885	Lass	A a.s.	Dana	DL -	890	C	1	C1	1	895	۸
sei	1111	vai	900	пр	Leu	Asn	110	905	Leu	261.	Leu	GIY	_	на	АГВ
Lvc	Acn	Lou		Lou	Thr	Val	Pho		Dho	Lvc	Ara	۸۱۵	910 Val	110	Lau
Lys	nsp	915	oju	Leu	1111	vai	920	vaı	me	LyS	Aig	925	vai	116	Leu
Va]	Tyr		lve	Asn	Cvs	Lys		lve	lve	lvs	Leu		Ser	Asn	Ser
, u 1	930	2,0	ي ز د	71911	Oys	935	LCU	Lyo	Lyo	Буз	940	110	561	41311	561
Arø		Ala	His	Asn	Ser	Thr	Asp	Leu	Asp	Pro		Lvs	Phe	Arø	Trn
945	0	,,,,,,,,			950			200		955		,0		0	960
	He	Pro	He	Ser		Leu	Gln	Val	Ara		Glv	Asn	Pro	Ala	

			965					970					975	
Thr Glu	Asn	Asn	Ser	lle	Trp	Glu	Leu	lle	His	Thr	Lys	Ser	Glu	Ile
		980					985					990		
Glu Gly	Arg	Pro	Glu	Thr	11e	Phe	Gln	Leu	Cys	Cys	Ser	Asp	Ser	Glu
	995]	1000]	1005			
Ser Lys	Thr	Asn	lle	Val	Lys	Val	He	Arg	Ser	He	Leu	Arg	Glu	Asn
1010]	1015]	1020				
Phe Arg	Arg	His	He	Lys	Cys	Glu	Leu	Pro	Leu	Glu	Lys	Thr	Cys	Lys
1025			1	030					035					1040
Asp Arg	Leu	Val	Pro	Leu	Lys	Asn	Arg	Val	Pro	Val	Ser	Ala	Lys	Leu
]	1045]	1050				j	055	
Ala Ser	Ser	Arg	Ser	Leu	Lys	Val	Leu	Lys	Asn	Ser	Ser	Ser	Asn	Glu
	1	060					1065					1070		
Trp Thr	Gly	Glu	Thr	Gly	Lys	Gly	Thr	Leu	Leu	Asp	Ser	Tyr	Glu	Gly
]	075					1080					1085			
Ser Leu	Ser	Ser	Gly	Thr	Gln	Ser	Ser	Gly	Cys	Pro	Thr	Ala	Glu	Gly
1090					1095					1100				
Arg Gln	Asp	Ser	Lys	Ser	Thr	Ser	Pro	Gly	Lys	Tyr	Pro	His	Pro	Gly
1105]	1110				:	1115					1120
1105 Leu Ala	Asp	Phe			Asn	Leu	lle			Ser	Asp	Ile		
	Asp				Asn	Leu				Ser	Asp			
]	Ala 1125	Asp				Lys 1130	Glu]	Leu 1135	Ser
Leu Ala	Asp]	Ala 1125	Asp		Gln		Lys 1130	Glu		Gly]	Leu 1135	Ser
Leu Ala	Asp 1	Asp 1140	Ala 1125 Asp	Asp His	Arg	Gln	Thr 1145	Lys 1130 Val	Glu Lys	Gln	Gly	Ser 1150	Leu 1135 Pro	Ser Thr
Leu Ala Asp Glu Lys Asp	Asp 1	Asp 1140	Ala 1125 Asp	Asp His	Arg Phe	Gln	Thr 1145	Lys 1130 Val	Glu Lys	Gln lle	Gly	Ser 1150	Leu 1135 Pro	Ser Thr
Leu Ala Asp Glu Lys Asp	Asp 1 11e 1155	Asp 1140 Glu	Ala 1125 Asp Ile	Asp His Gln	Arg Phe	Gln Gln 1160	Thr 1145 Arg	Lys 1130 Val Leu	Glu Lys Arg	Gln lle	Gly Ser 1165	Ser 1150 Glu	Leu 1135 Pro Asp	Ser Thr Pro
Leu Ala Asp Glu Lys Asp	Asp 1 11e 1155 His	Asp 1140 Glu Pro	Ala 1125 Asp Ile	Asp His Gln Ala	Arg Phe Glu	Gln Gln 1160 Gln	Thr 1145 Arg Gln	Lys 1130 Val Leu Pro	Glu Lys Arg Gly	Gln lle	Gly Ser 1165 Glu	Ser 1150 Glu	Leu 1135 Pro Asp	Ser Thr Pro
Leu Ala Asp Glu Lys Asp	Asp 1 11e 1155 His	Asp 1140 Glu Pro	Ala 1125 Asp Ile Glu	Asp His Gln Ala	Arg Phe Glu	GIn GIn I160 GIn	Thr 1145 Arg Gln	Lys 1130 Val Leu Pro	Glu Lys Arg Gly	Gln lle Pro 1180	Gly Ser 1165 Glu	Ser 1150 Glu Ser	Leu 1135 Pro Asp Gly	Ser Thr Pro Glu
Leu Ala Asp Glu Lys Asp Asp Val 1170	Asp 1 11e 1155 His	Asp 1140 Glu Pro	Ala 1125 Asp Ile Glu	Asp His Gln Ala	Arg Phe Glu	GIn GIn I160 GIn	Thr 1145 Arg Gln	Lys 1130 Val Leu Pro	Glu Lys Arg Gly	Gln lle Pro 1180	Gly Ser 1165 Glu	Ser 1150 Glu Ser	Leu 1135 Pro Asp Gly	Ser Thr Pro Glu
Leu Ala Asp Glu Lys Asp Asp Val 1170 Gly Gln	Asp 11e 1155 His Lys	Asp 1140 Glu Pro Gly	Ala 1125 Asp Ile Glu Gly	Asp His Gln Ala Glu	Arg Phe Glu 1175 Gln	Gln Gln 1160 Gln Pro	Thr 1145 Arg Gln Lys	Lys 1130 Val Leu Pro Leu	Lys Arg Gly Val	Gln lle Pro ll80 Arg	Gly Ser 1165 Glu Gly	Ser 1150 Glu Ser His	Leu 1135 Pro Asp Gly	Thr Pro Glu Cys
Leu Ala Asp Glu Lys Asp Asp Val 1170 Gly Gln 1185	Asp 11e 1155 His Lys	Asp 1140 Glu Pro Gly Arg	Ala 1125 Asp Ile Glu Gly	Asp His Gln Ala Glu	Arg Phe Glu 1175 Gln	Gln Gln 1160 Gln Pro	Thr 1145 Arg Gln Lys	Lys 1130 Val Leu Pro Leu	Lys Arg Gly Val	Gln lle Pro ll80 Arg	Gly Ser 1165 Glu Gly	Ser 1150 Glu Ser His	Leu 1135 Pro Asp Gly	Thr Pro Glu Cys
Leu Ala Asp Glu Lys Asp Asp Val 1170 Gly Gln 1185	Asp 11e 1155 His Lys	Asp 1140 Glu Pro Gly Arg	Ala 1125 Asp Ile Glu Gly Lys 1205	Asp His Gln Ala Glu 1190 Thr	Arg Phe Glu 1175 Gln Asn	GIn GIn 1160 GIn Pro	Thr 1145 Arg Gln Lys	Lys 1130 Val Leu Pro Leu Lys 1210	Lys Arg Gly Val 1195 Arg	Gln lle Pro l180 Arg	Gly Ser 1165 Glu Gly	Ser 1150 Glu Ser His	Leu 1135 Pro Asp Gly Phe Thr	Thr Pro Glu Cys 1200 Leu
Leu Ala Asp Glu Lys Asp Asp Val 1170 Gly Gln 1185 Pro 11e	Asp 11e 1155 His Lys Lys	Asp 1140 Glu Pro Gly Arg	Ala 1125 Asp Ile Glu Gly Lys 1205	Asp His Gln Ala Glu 1190 Thr	Arg Phe Glu 1175 Gln Asn	Gln Gln 1160 Gln Pro Ser	Thr 1145 Arg Gln Lys	Lys 1130 Val Leu Pro Leu Lys 1210	Lys Arg Gly Val 1195 Arg	Gln lle Pro l180 Arg	Gly Ser 1165 Glu Gly Arg	Ser 1150 Glu Ser His	Leu 1135 Pro Asp Gly Phe Thr	Thr Pro Glu Cys 1200 Leu
Leu Ala Asp Glu Lys Asp Asp Val 1170 Gly Gln 1185 Pro 11e	Asp 11e 1155 His Lys Lys	Asp 1140 Glu Pro Gly Arg Gln 1220	Ala 1125 Asp Ile Glu Gly Lys 1205 Ile	Asp His Gln Ala Glu 1190 Thr	Arg Phe Glu 1175 Gln Asn	Gln Gln 1160 Gln Pro Ser	Thr 1145 Arg Gln Lys Thr Ser	Lys 1130 Val Leu Pro Leu Lys 1210 Leu	Lys Arg Gly Val 1195 Arg	Gln lle Pro l180 Arg Asp	Gly Ser 1165 Glu Gly Arg	Ser 1150 Glu Ser His Gly Ser 1230	Leu 1135 Pro Asp Gly Phe Thr 1215 Glu	Thr Pro Glu Cys 1200 Leu Asn
Leu Ala Asp Glu Lys Asp Asp Val 1170 Gly Gln 1185 Pro lle Leu Lys Ala Thr	Asp 11e 1155 His Lys Lys	Asp 1140 Glu Pro Gly Arg Gln 1220	Ala 1125 Asp Ile Glu Gly Lys 1205 Ile	Asp His Gln Ala Glu 1190 Thr	Arg Phe Glu 1175 Gln Asn His	Gln Gln 1160 Gln Pro Ser	Thr 1145 Arg Gln Lys Thr Ser	Lys 1130 Val Leu Pro Leu Lys 1210 Leu	Lys Arg Gly Val 1195 Arg	Gln lle Pro l180 Arg Asp Ser Glu	Gly Ser 1165 Glu Gly Arg	Ser 1150 Glu Ser His Gly Ser 1230	Leu 1135 Pro Asp Gly Phe Thr 1215 Glu	Thr Pro Glu Cys 1200 Leu Asn

His Gly Lys Ser <210> 3322 <211> 514 <212> PRT <213> Homo sapiens <400> 3322 Met Glu Glu Asn Val Phe Trp Glu Cys Lys Ala Asn Gly Arg Pro Lys Pro Thr Tyr Lys Trp Leu Lys Asn Gly Glu Pro Leu Leu Thr Arg Asp Arg Ile Gln Ile Glu Gln Gly Thr Leu Asn Ile Thr Ile Val Asn Leu Ser Asp Ala Gly Met Tyr Gln Cys Leu Ala Glu Asn Lys His Gly Val lle Phe Ser Asn Ala Glu Leu Ser Val Ile Ala Val Gly Pro Asp Phe Ser Arg Thr Leu Leu Lys Arg Val Thr Leu Val Lys Val Gly Glu Val Val IIe Glu Cys Lys Pro Lys Ala Ser Pro Lys Pro Val Tyr Thr Trp Lys Lys Gly Arg Asp Ile Leu Lys Glu Asn Glu Arg lle Thr Ile Ser Glu Asp Gly Asn Leu Arg Ile Ile Asn Val Thr Lys Ser Asp Ala Gly Ser Tyr Thr Cys Ile Ala Thr Asn His Phe Gly Thr Ala Ser Ser Thr Gly Asn Leu Val Val Lys Asp Pro Thr Arg Val Met Val Pro Pro Ser Ser Met Asp Val Thr Val Gly Glu Ser Ile Val Leu Pro Cys Gln

Val Thr His Asp His Ser Leu Asp Ile Val Phe Thr Trp Ser Phe Asn

		195					200					205			
G1y	His	Leu	He	Asp	Phe	Asp	Arg	Asp	Gly	Asp	His	Phe	Glu	Arg	Val
	210					215					220				
Gly	Gly	Asp	Ser	Ala	Gly	Asp	Leu	Met	lle	Arg	Asn	Ile	Gln	Leu	Lys
225					230					235					240
His	Ala	Gly	Lys	Tyr	Val	Cys	Met	Val	Gln	Thr	Ser	Val	Asp	Arg	Leu
				245					250					255	
Ser	Ala	Ala	Ala	Asp	Leu	He	Val	Arg	Gly	Pro	Pro	G1y	Pro	Pro	Glu
			260					265					270		
Ala	Val	Thr	Ile	Asp	Glu	Ile	Thr	Asp	Thr	Thr	Ala	Gln	Leu	Ser	Trp
		275					280					285			
Arg	Pro	Gly	Pro	Asp	Asn	His	Ser	Pro	He	Thr	Met	Tyr	Val	He	Gln
	290					295					300				
Ala	Arg	Thr	Pro	Phe	Ser	Val	Gly	Trp	Gln	Ala	Val	Ser	Thr	Val	Pro
305					310					315					320
Glu	Leu	Ile	Asp	Gly	Lys	Thr	Phe	Thr	Ala	Thr	Val	Val	Gly	Leu	Asn
				325					330					335	
Pro	Trp	Val		Tyr	Glu	Phe	Arg		Val	Ala	Ala	Asn		He	Gly
			340					345					350		
He	Gly		Pro	Ser	Arg	Pro		Glu	Lys	Arg	Arg		Glu	Glu	Ala
		355			_		360		_			365			
Leu		Glu	Val	Thr	Pro	Ala	Asn	Val	Ser	Gly		Gly	Gly	Ser	Lys
C	370		V 1	7.7	Tr.I	375	61	TE1		D	380	61		6.1	
	GJU	Leu	val	11e		Trp	Glu	inr	val		Glu	Glu	Leu	GIn	
385	A 20.00	C1	Dl	C1	390	V = 1	Va l	۸1	Dl	395	D	Т	C1	1	400
GIY	Arg	GTy	rne	405		Val	vai	АТа	410		Pro	ıyr	GIY		
110	Trn	Mot	Lou			Leu	Λla	Sor			A 1 a	Sor	Ara	415	
116	пр	met	420	1111	vai	Leu	лта	425	ліа	nsp	піа	261	430	1 9 1	vai
Phe	Arø	Asn		Ser	Val	His	Pro		Ser	Pro	Phe	G1n		lvs	Val
1110	5	435	014	001	, (11	1115	440	1110	561	110	1110	445	vai	15,5	701
Glv	Val		Asn	Asn	Lvs	Gly		Glv	Pro	Phe	Ser		Thr	Thr	Val
,	450				,	455		~ .			460				
Val		Ser	Ala	Glu	Glu	Glu	Pro	Thr	Lys	Pro		Ala	Ser	Πe	Phe
465	-				470				-	475					480
	Arg	Ser	Leu	Ser		Thr	Asp	He	Glu		Phe	Trp	Ala	Ser	

490 485 Leu Glu Lys Asn Arg Gly Arg Ile Gln Gly Tyr Glu Val Lys Tyr Trp 505 510 Arg His <210> 3323 <211> 429 <212> PRT <213> Homo sapiens <400> 3323 Met Leu Gly Lys Arg Phe Pro Asn Ile Lys Val Ile Glu Ser Gly Val 10 Lys Gln Leu Lys Ser Glu Glu His Cys lle Val Thr Glu Asp Gly Asn 25 Gln His Val Tyr Lys Lys Leu Cys Leu Cys Ala Gly Ala Lys Pro Lys 45 35 40 Leu Ile Cys Glu Gly Asn Pro Tyr Val Leu Gly Ile Arg Asp Thr Asp 55 Ser Ala Gln Glu Phe Gln Lys Gln Leu Thr Lys Ala Lys Arg Ile Met lle lle Gly Asn Gly Gly lle Ala Leu Glu Leu Val Tyr Glu lle Glu 85 90 95 Gly Cys Glu Val Ile Trp Ala Ile Lys Asp Lys Ala Ile Gly Asn Thr 105 Phe Phe Asp Ala Gly Ala Ala Glu Phe Leu Thr Ser Lys Leu Ile Ala 115 120 125 Glu Lys Ser Glu Ala Lys Ile Ala His Lys Arg Thr Arg Tyr Thr Thr 135 Glu Gly Arg Lys Lys Glu Ala Arg Ser Lys Ser Lys Ala Asp Asn Val 155 150 Gly Ser Ala Leu Gly Pro Asp Trp His Glu Gly Leu Asn Leu Lys Gly

170

Thr Lys Glu Phe Ser His Lys Ile His Leu Glu Thr Met Cys Glu Val

175

			180					185					190		
Lys	Lys	He	Tyr	Leu	Gln	Asp	Glu	Phe	Arg	Ile	Leu	Lys	Lys	Lys	Ser
		195					200					205			
Phe	Thr	Phe	Pro	Arg	Asp	His	Lys	Ser	Val	Thr	Ala	Asp	Thr	Glu	Met
	210					215					220				
Trp	Pro	Val	Tyr	Val	Glu	Leu	Thr	Asn	Glu	Lys	lle	Tyr	Gly	Cys	Asp
225					230					235					240
Phe	He	Val	Ser	Ala	Thr	Gly	Val	Thr	Pro	Asn	Val	Glu	Pro	Phe	Leu
				245					250					255	
His	Gly	Asn	Ser	Phe	Asp	Leu	Gly	Glu	Asp	G1 y	Gly	Leu	Lys	Val	Asp
			260					265					270		
Asp	His	Met	His	Thr	Ser	Leu	Pro	Asp	He	Tyr	Ala	Ala	G1 y	Asp	He
		275					280					285			
Cys	Thr	Thr	Ser	Trp	Gln	Leu	Ser	Pro	Val	Trp	Gln	Gln	Met	Arg	Leu
	290					295					300				
Trp	Thr	Gln	Ala	Arg	Gln	Met	Gly	Trp	Tyr	Ala	Ala	Lys	Cys	Met	Ala
305					310					315					320
Ala	Ala	Ser	Ser	Gly	Asp	Ser	Ile	Asp	Met	Asp	Phe	Ser	Phe	Glu	Leu
				325					330					335	
Phe	Ala	His	Val	Thr	Lys	Phe	Phe	Asn	Tyr	Lys	Val	Val	Leu	Leu	Gly
			340					345					350		
Lys	Tyr	Asn	Ala	Gln	Gly	Leu	Gly	Ser	Asp	His	Glu	Leu	Met	Leu	Arg
		355					360					365			
Cys	Thr	Lys	Gly	Arg	Glu	Tyr	lle	Lys	Val	Val	Met	Gln	Asn	Gly	Arg
	370					375					380				
Met	Met	Gly	Ala	Val	Leu	11e	Gly	G]u	Thr	Asp	Leu	G]u	Glu	Thr	Phe
385					390					395					400
Glu	Asn	Leu	Пе	Leu	Asn	Gln	Met	Asn	Leu	Ser	Ser	Tyr	G1 y	Glu	Asp
				405					410					415	
Leu	Leu	Asp		Asn	Пe	Asp	He		Asp	Tyr	Phe	Asp			
			420					425							

<210> 3324 <211> 1130 <212> PRT <213> Homo sapiens

40 45 Ser Ala Ser Thr Pro Arg Gly Phe Ser His Gln Gly Arg Pro Gly Arg 55 Ala Pro Ala Thr Pro Leu Pro Leu Val Val Arg Pro Leu Phe Ser Val 65 70 Ala Pro Gly Asp Arg Ala Leu Ser Leu Glu Arg Ala Arg Gly Thr Gly 90 Ala Ser Met Ala Val Ala Ala Arg Ser Gly Arg Arg Arg Ser Gly 100 105 110 Ala Asp Gln Glu Lys Ala Glu Arg Glv Glu Gly Ala Ser Arg Ser Pro 120 125 Arg Gly Val Leu Arg Asp Glv Glv Gln Gln Glu Pro Gly Thr Arg Glu 135 Arg Asp Pro Asp Lys Ala Thr Arg Phe Arg Met Glu Glu Leu Arg Leu 145 150 155 160 Thr Ser Thr Thr Phe Ala Leu Thr Gly Asp Ser Ala His Asn Gln Ala

225 230 235 240 Arg Lys Ile Met Leu Leu Thr Asp Pro Glu Ile Glu Ser Ser Leu Leu

				245					250					255	
He	Ser	Ser	Asp	Glu	Gly	Ala	Thr	Tyr	Gln	Lys	Tyr	Arg	Leu	Asn	Phe
			260					265					270		
Tyr	He	Gln	Ser	Leu	Leu	Phe	His	Pro	Lys	Gln	Glu	Asp	Trp	He	Leu
		275					280					285			
Ala	Tyr	Ser	Gln	Asp	G1n	Lys	Leu	Tyr	Ser	Ser	Ala	Glu	Phe	Gly	Arg
	290					295					300				
Arg	Trp	Gln	Leu	Ile	Gln	Glu	Gly	Val	Val	Pro	Asn	Arg	Phe	Tyr	Trp
305					310					315					320
Ser	Val	Met	Gly	Ser	Asn	Lys	Glu	Pro	Asp	Leu	Val	His	Leu	Glu	Ala
				325					330					335	
Arg	Thr	Val	Asp	G1 y	His	Ser	His	Tyr	Leu	Thr	Cys	Arg	Met	Gln	Asn
			340					345					350		
Cys	Thr	Glu	Ala	Asn	Arg	Asn	GIn	Pro	Phe	Pro	Gly	Tyr	He	Asp	Pro
		355					360					365			
Asp	Ser	Leu	He	Val	Gln	Asp	His	Tyr	Val	Phe	Val	Gln	Leu	Thr	Ser
	370					375					380				
Gly	Gly	Arg	Pro	His	Tyr	Tyr	Val	Ser	Tyr	Arg	Arg	Asn	Ala	Phe	Ala
385					390					395					400
Gln	Met	Lys	Leu	Pro	Lys	Tyr	Ala	Leu	Pro	Lys	Asp	Met	His	Val	lle
				405					410					415	
Ser	Tt														
	mr	Asp	Glu	Asn	Gln	Val	Phe	Ala	Ala	Val	Gln	Glu	Trp	Asn	G]n
	mr	Asp	Glu 420	Asn	Gln	Val	Phe	Ala 425	Ala	Val	Gln	Glu	Trp 430	Asn	G1n
Asn								425					430		
Asn			420					425					430		
	Asp	Thr 435	420	Asn	Leu	Tyr	11e 440	425 Ser	Asp	Thr	Arg	Gly 445	430 Val	Tyr	Phe
Thr	Asp Leu 450	Thr 435 Ala	420 Tyr Leu	Asn Glu	Leu Asn	Tyr Val 455	11e 440 Gln	425 Ser Ser	Asp Ser	Thr Arg	Arg Gly 460	Gly 445 Pro	430 Val Glu	Tyr Gly	Phe Asn
Thr	Asp Leu 450	Thr 435 Ala	420 Tyr	Asn Glu	Leu Asn	Tyr Val 455	11e 440 Gln	425 Ser Ser	Asp Ser	Thr Arg	Arg Gly 460	Gly 445 Pro	430 Val Glu	Tyr Gly	Phe Asn
Thr 11e 465	Asp Leu 450 Met	Thr 435 Ala Ile	420 Tyr Leu Asp	Asn Glu Leu	Leu Asn Tyr 470	Tyr Val 455 Glu	11e 440 Gln Val	425 Ser Ser Ala	Asp Ser Gly	Thr Arg 11e 475	Arg Gly 460 Lys	Gly 445 Pro Gly	430 Val Glu Met	Tyr Gly Phe	Phe Asn Leu 480
Thr 11e 465	Asp Leu 450 Met	Thr 435 Ala Ile	420 Tyr Leu	Asn Glu Leu	Leu Asn Tyr 470	Tyr Val 455 Glu	11e 440 Gln Val	425 Ser Ser Ala	Asp Ser Gly Lys	Thr Arg 11e 475	Arg Gly 460 Lys	Gly 445 Pro Gly	430 Val Glu Met	Tyr Gly Phe Tyr	Phe Asn Leu 480
Thr 11e 465 Ala	Asp Leu 450 Met Asn	Thr 435 Ala Ile Lys	420 Tyr Leu Asp	Asn Glu Leu Ile 485	Leu Asn Tyr 470 Asp	Tyr Val 455 Glu Asn	lle 440 Gln Val	425 Ser Ser Ala Val	Asp Ser Gly Lys 490	Thr Arg He 475 Thr	Arg Gly 460 Lys	Gly 445 Pro Gly	430 Val Glu Met	Tyr Gly Phe Tyr 495	Phe Asn Leu 480 Asn
Thr 11e 465 Ala	Asp Leu 450 Met Asn	Thr 435 Ala Ile Lys	420 Tyr Leu Asp Lys	Asn Glu Leu Ile 485	Leu Asn Tyr 470 Asp	Tyr Val 455 Glu Asn	lle 440 Gln Val	425 Ser Ser Ala Val	Asp Ser Gly Lys 490	Thr Arg He 475 Thr	Arg Gly 460 Lys	Gly 445 Pro Gly	430 Val Glu Met Thr	Tyr Gly Phe Tyr 495	Phe Asn Leu 480 Asn
Thr 11e 465 Ala	Asp Leu 450 Met Asn Gly	Thr 435 Ala Ile Lys	420 Tyr Leu Asp Lys Asp 500	Asn Glu Leu Ile 485 Trp	Leu Asn Tyr 470 Asp	Tyr Val 455 Glu Asn Leu	lle 440 Gln Val Gln Leu	425 Ser Ser Ala Val Gln 505	Asp Ser Gly Lys 490 Ala	Thr Arg 11e 475 Thr	Arg Gly 460 Lys Phe	Gly 445 Pro Gly lle	430 Val Glu Met Thr Asp 510	Tyr Gly Phe Tyr 495 Leu	Phe Asn Leu 480 Asn
Thr 11e 465 Ala	Asp Leu 450 Met Asn Gly	Thr 435 Ala Ile Lys Arg	420 Tyr Leu Asp Lys	Asn Glu Leu Ile 485 Trp	Leu Asn Tyr 470 Asp	Tyr Val 455 Glu Asn Leu	lle 440 Gln Val Gln Leu	425 Ser Ser Ala Val Gln 505	Asp Ser Gly Lys 490 Ala	Thr Arg 11e 475 Thr	Arg Gly 460 Lys Phe	Gly 445 Pro Gly 11e Thr	430 Val Glu Met Thr Asp 510	Tyr Gly Phe Tyr 495 Leu	Phe Asn Leu 480 Asn
Thr 11e 465 Ala Lys	Asp Leu 450 Met Asn Gly	Thr 435 Ala Ile Lys Arg Pro 515	420 Tyr Leu Asp Lys Asp 500	Asn Glu Leu Ile 485 Trp	Leu Asn Tyr 470 Asp Arg	Tyr Val 455 Glu Asn Leu	11e 440 Gln Val Gln Leu Leu 520	425 Ser Ser Ala Val Gln 505 Pro	Asp Ser Gly Lys 490 Ala	Thr Arg 11e 475 Thr Pro	Arg Gly 460 Lys Phe Asp	Gly 445 Pro Gly 11e Thr Leu 525	430 Val Glu Met Thr Asp 510 His	Tyr Gly Phe Tyr 495 Leu Leu	Phe Asn Leu 480 Asn Arg

	530					535					540				
Asp	Thr	Ala	Pro	Ser	lle	He	Val	Ala	Ser	G1 y	Asn	He	Gly	Ser	Głu
545					550					555					560
Leu	Ser	Asp	Thr	Asp	He	Ser	Met	Phe	Val	Ser	Ser	Asp	Ala	Gly	Asn
				565					570					575	
Thr	Trp	Arg	Gln	lle	Phe	Glu	Glu	Glu	His	Ser	Val	Leu	Tyr	Leu	Asp
			580					585					590		
Gln	Gly	Gly	Val	Leu	Val	Ala	Met	Lys	His	Thr	Ser	Leu	Pro	Ile	Arg
		595					600					605			
His	Leu	Trp	Leu	Ser	Phe	Asp	Glu	Gly	Arg	Ser	Trp	Ser	Lys	Tyr	Ser
	610					615					620				
Phe	Thr	Ser	He	Pro	Leu	Phe	Val	Asp	Gly	Val	Leu	Gly	Glu	Pro	G1 y
625					630					635					640
Glu	Glu	Thr	Leu	He	Met	Thr	Val	Phe	Gly	His	Phe	Ser	His	Arg	Ser
				645					650					655	
Glu	Trp	Gln	Leu	Val	Lys	Val	Asp	Tyr	Lys	Ser	He	Phe	Asp	Arg	Arg
			660					665					670		
Cys	Ala	Glu	Glu	Asp	Tyr	Arg	Pro	Trp	Gln	Leu	His	Ser	Gln	G1 y	Glu
		675					680					685			
Ala		lle	Met	Gly	Ala		Arg	lle	Tyr	Lys		Arg	Lys	Ser	Glu
	690					695					700				
	Lys	Cys	Met	Gln		Lys	Tyr	Ala	Gly		Met	Glu	Ser	Glu	
705					710				_	715	_				720
Cys	Val	Cys	Thr		Ala	Asp	Phe	Asp		Asp	Tyr	Gly	Tyr		Arg
			0.1	725	0		Б		730		101		В	735	-
H1S	Ser	Asn	Gly	GIn	Cys	Leu	Pro		Phe	Irp	Phe	Asn		Ser	Ser
	C .		740	C	C		C1	745	C	т		۵	750 C	TI	C1
Leu	ser		Asp	Cys	Ser	Leu		GIN	ser	IVI	Leu		Ser	inr	GIy
т	A 22.00	755	Vol.	Vol	Con	Aan	760	Cva	Than	Acus	C1	765 V1	A 20.00	C1	C 1
1) 1	770	Lys	Val	vai	261	775	ASII	Cys	1111	ASP	780	val	AI g	Glu	GIII
Tyr		Λla	Lys	Pro	Gln		Cvc	Dro	Glv	Lve		Pro	Ana	Clv	Lau
785	1111	MIA	Lys	110	790	Lys	Cys	110	GIŸ	795	AJA	110	му	01 y	800
	110	Val	Thr	Λ1а		Clv	Lvc	Lou	The		Clu	Cla	Clv	Hic	
m g	110	, a1	1 1 1 1 1	805	nsp	оту	rio	Leu	810	nid	oru	HLD	01 y	815	11511
Val	Thr	Leu	Met.		Gln	Leu	G1n	Glu		Asp	Val	Gln	Arø		Len

			820					825					830		
Ile	Gln	Val	Asp	Phe	Gly	Asp	Gly	He	Ala	Val	Ser	Tyr	Val	Asn	Leu
		835					840					845			
Ser	Ser	Met	Glu	Asp	Gly	He	Lys	His	Val	Tyr	Gln	Asn	Va]	Gly	lle
	850					855					860				
Phe	Arg	Val	Thr	Val	Gln	Val	Asp	Asn	Ser	Leu	Gly	Ser	Asp	Ser	Ala
865					870	,				875					880
Val	Leu	Tyr	Leu	His	Val	Thr	Cys	Pro	Leu	Glu	His	Val	His	Leu	Ser
				885					890					895	
Leu	Pro	Phe	Val	Thr	Thr	Lys	Asn	Lys	Glu	Val	Asn	Ala	Thr	Ala	Val
			900					905					910		
Leu	Trp	Pro	Ser	Gln	Val	Gly	Thr	Leu	Thr	Tyr	Val	Trp	Trp	Tyr	Gly
		915					920					925			
Asn	Asn	Thr	Glu	Pro	Leu	He	Thr	Leu	Glu	Gly	Ser	He	Ser	Phe	Arg
	930					935					940				
Phe	Thr	Ser	Glu	Gly	Met	Asn	Thr	lle	Thr	Val	Gln	Val	Ser	Ala	Gly
945					950					955					960
Asn	Ala	He	Leu	Gln	Asp	Thr	Lys	Thr	He	Ala	Val	Tyr	Glu	Glu	Phe
				965					970					975	
Arg	Ser	Leu	Arg	Leu	Ser	Phe	Ser	Pro	Asn	Leu	Asp	Asp	Tyr	Asn	Pro
			980					985					990		
Asp	Ile	Pro	Glu	Trp	Arg	Arg	Asp	lle	Gly	Arg	Val	He	Lys	Lys	Ser
		995					1000					1005			
Leu	Val	Glu	Ala	Thr	Gly	Val	Pro	Gly	Gln	His	He	Leu	Val	Ala	Val
	1010					1015					1020				
Leu	Pro	Gly	Leu	Pro	Thr	Thr	Ala	Glu	Leu	Phe	Val	Leu	Pro	Tyr	Gln
1029	5				1030					1035					1040
Asp	Pro	Ala	Gly	Glu	Asn	Lys	Arg	Ser	Thr	Asp	Asp	Leu	Glu	Gln	11e
				1045					1050					1055	
Ser	Glu	Leu	Leu	lle	His	Thr	Leu	Asn	Gln	Asn	Ser	Val	His	Phe	Glu
			1060					1065					1070		
Leu	Lys	Pro	Gly	Va]	Arg	Va1	Leu	Va]	His	Ala	Ala	His	Leu	Thr	Ala
		1075					1080					1085			
		Leu	Val	Asp			Pro	Thr	His			Ser	Ala	Met	Leu
	1090					1095					1100				
Val	Leu	Leu	Ser	Val	Val	Phe	Val	Gly	Leu	Ala	Val	Phe	Val	Пе	Tyr

1105 1110 1115 1120 Lys Phe Lys Arg Lys Tyr Phe His Ser Cys 1125 1130

<210> 3325

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3325

Met Met Ser Asp Gly Lys Leu Gly Arg Gln Ser Val Asp Ser Pro Cys

1 5 10 15

Ser Gly Thr Thr Cys Ser Leu Thr Ala Ala Gly Gly His Thr Thr Arg
20 25 30

Ile Ala Leu Cys His Leu Val Ile Val Phe Phe Ala Leu Thr Glu
35 40 45

Asp Arg Lys Gly Gly Lys Ile Ser Phe Cys Ala His Thr Pro Leu Asn 50 55 60

Cys Met Phe Gly Phe Phe Cys Phe Val Lys Gly Cys Lys Thr Ser Ser 65 70 75 80

Ser Cys Ser Thr Ala Asn Thr Arg Gly Gln His Pro Ala Ser Cys Leu 85 90 95

Cys Phe Pro Ala Gly Arg Thr His Arg Gln Ser Gly Asn Leu Thr Phe 100 105 110

Pro Arg Ser Glu Asn Gly Leu Phe Ser Ser Glu Val Met Ile Arg Glu
115 120 125

Ser Leu Leu Ile Phe Val Ile His Thr Lys Thr Leu Thr Ser Gly Glu 130 135 140

Lys Leu Asp Thr Leu Asn Asn Glu Lys Ser Glu Gln Ala Phe Arg Gly
145 150 155 160

Cys Val Ser His Thr Glu Gly Ala Ser Pro Trp Ala His Ser Gln Asp 165 170 175

Pro Ser Phe Thr Asp His Arg Gly Cys Val Leu Gln Val Ala Asp Thr 180 185 190

Ala Leu Trp Phe

195

<210> 3326

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3326

Met Leu Ser Leu Glu Cys Thr Gln Leu Pro His His Ala Ser Cys Thr

1 5 10 15

Cys Cys Ser Thr Ala Pro Pro Ser Val Ser Ala Ala Arg Pro Ser Pro 20 25 30

Cys Ser lle Val Val Ser Phe Asp Cys Ala Gly Trp Arg Val Pro Cys 35 40 45

Pro Pro Ser Leu Val Phe Gln Asn Ser Phe Gly Trp Phe Cys Thr Cys
50 55 60

Val Phe His Met Val Phe Thr Ser Ile Val Arg Lys Thr Lys His Phe 65 70 75 80

Ser Lys Ser His Leu Glu Ser Phe Asn Pro Phe Met Ser Val Ser Ala 85 90 95

Lys Phe Ser Cys Gly Leu Ala Gly Leu Leu Cys Ser Val Pro Glu Arg 100 105 110

Ala Gly Leu Ser Leu Gly Ile Cys Arg His Pro Leu Trp His Ser Ala 115 120 125

Gly Thr Leu Ser Ser Asn Leu Leu Ala Pro Ser Ala Arg Trp Asp His 130 135 140

<210> 3327

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3327

Met Tyr Phe Tyr Asp Gly Val Ser Arg Asp Ala Ala Ser Ala Ala Leu 10 Ala Asp Ala Ala Glu Glu Leu Leu Asp Arg Leu Ala Ser His Ser Met 20 25 30 Leu Pro Ser Asp Val Ser Ile Leu Tyr His Met Lys Thr Leu Leu Leu 40 Leu Gln Asp Thr Glu Arg Leu Lys His Ala Leu Glu Met Phe Pro Glu 50 60 55 His Cys Thr Met Pro Pro Gly Gly Lys Ser Glu Ala Gln Arg Ala Trp 70 75 Ala Asn Gly Thr Gly His Thr Ala His Gln Trp Leu His Val Ser Ser 90 Asp Leu Gly Leu Leu Ser Val Phe Pro Ile Ser Met Thr Leu Thr 105 Asp Ala Gly Val Gln Gly Tyr Val His Pro Arg Pro Ala Gly Ala Gln 120 Ser Thr Glu Ala Trp Pro Ser Glu Glu Thr Glu Gly Ser Val Gly His 130 135 140 His Asp Glu Ser Leu Val Ser Thr Arg Pro Ser Cys Ala Phe Leu Leu 150 155 160 His Gly Thr Ala Arg Val Gly Val Pro Glu Gly Pro Ser Trp Pro Trp 170 Lys Val Pro Tyr Ser Arg Gln Glu 180

<210> 3328

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3328

Met Gly Ser Val Phe Leu Gly Lys Ser Gly Leu Leu Cys Lys Ala Pro
I 5 10 15

Ala Leu Pro Asp Ser Ser Pro Asn Thr Arg Ala Lys Val Gly Val Leu

Phe Leu Pro Leu Leu Pro Pro Asn Asp Leu Glu Gly Ile Cys Val Pro Ala Val Pro Phe Pro Ala Thr Phe Ala Pro Gly Asn Ser Pro Pro His Thr Ser Pro His Leu Ile Gly Asn Phe Pro Leu Pro Asp Leu Arg Ser Ile Ser Thr Pro Ser Leu Gln Asn Gly Asp Asn Glu Leu Thr Lys Ser Met Phe Asn Thr Leu Leu Thr Glu Leu Thr Met Ile Leu Gly Gly Ser Gly Met <210> 3329 <211> 326 <212> PRT <213> Homo sapiens <400> 3329 Met Lys Cys Thr Ala Val Leu Cys Cys Arg Met Ala Pro Leu Gln Lys Ala Gln 11e Val Arg Met Val Lys Asn Leu Lys Gly Ser Pro I1e Thr Leu Ser lle Gly Asp Gly Ala Asn Asp Val Ser Met Ile Leu Glu Ser His Val Gly Ile Gly Ile Lys Gly Lys Glu Gly Arg Gln Ala Ala Arg Asn Ser Asp Tyr Ser Val Pro Lys Phe Lys His Leu Lys Lys Leu Leu Leu Ala His Gly His Leu Tyr Tyr Val Arg Ile Ala His Leu Val Gln Tyr Phe Phe Tyr Lys Asn Leu Cys Phe Ile Leu Pro Gln Phe Leu Tyr

Gln Phe Phe Cys Gly Phe Ser Gln Gln Pro Leu Tyr Asp Ala Ala Tyr

		115					120					125			
Leu	Thr	Met	Tyr	Asn	Πe	Cys	Phe	Thr	Ser	Leu	Pro	Πe	Leu	Ala	Tyr
	130					135					140				
Ser	Leu	Leu	Glu	G1n	His	11e	Asn	He	Asp	Thr	Leu	Thr	Ser	Asp	Pro
145					150					155					160
Arg	Leu	Tyr	Met	Lys	He	Ser	Gly	Asn	Ala	Met	Leu	Gln	Leu	Gly	Pro
				165					170					175	
Phe	Leu	Tyr	Trp	Thr	Phe	Leu	Ala	Ala	Phe	Glu	Gly	Thr	Val	Phe	Phe
			180					185					190		
Phe	Gly	Thr	Tyr	Phe	Leu	Phe	Gln	Thr	Ala	Ser	Leu	Glu	Glu	Asn	G1 y
		195					200					205			
Lys	Val	Tyr	G1y	Asn	Trp	Thr	Phe	Gly	Thr	He	Val	Phe	Thr	Val	Leu
	210					215					220				
Val	Phe	Thr	Val	Thr	Leu	Lys	Leu	Ala	Leu	Asp	Thr	Arg	Phe	Trp	Thr
225					230					235					240
Trp	He	Asn	His	Phe	Val	lle	Trp	G1 y	Ser	Leu	Ala	Phe	Tyr	Val	Phe
				245					250					255	
Phe	Ser	Phe	Phe	Trp	Gly	Gly	Ile	He	Trp	Pro	Phe	Leu	Lys	Gln	G1n
			260					265					270		
Arg	Met	Tyr	Phe	Val	Phe	Ala	Gln	Met	Leu	Ser	Ser	Val	Ser	Thr	Trp
		275					280					285			
Leu	Ala	He	lle	Leu	Leu	He	Phe	lle	Ser	Leu	Phe	Pro	Glu	lle	Leu
	290					295					300				
Leu	He	Val	Leu	Lys	Asn	Val	Arg	Arg	Arg	Ser	Ala	Arg	Val	His	His
305					310					315					320
Leu	lle	Ser	Ser		Ala										
				325											

<210> 3330

〈211〉 913

<212> PRT

<213> Homo sapiens

<400> 3330

Met Pro Gly Glu Ala Val Glu Tyr His Ser Ile Gln Leu Ile Arg Asp

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Glu	Phe	Leu	Met	Asn	Val	Gln	Lys	Phe	Ala	Ser	Asn	He	Gln	Arg	Thr
			20					25					30		
Met	Gln	Gln	Leu	Glu	Gly	Glu	He	Lys	Leu	Glu	Met	Pro	He	He	Ser
		35					40					45			
Val	Glu	Gly	Glu	Val	Ser	Asp	Leu	Ala	Ala	Asp	Pro	Glu	Thr	Val	Asp
	50					55					60				
lle	Leu	Glu	Gln	Cys	Val	He	Asn	Trp	Leu	Asn	Gln	lle	Ser	Thr	Ala
65					70					75					80
Val	Glu	Ala	Gln	Leu	Lys	Lys	Thr	Pro	Gln	Gly	Lys	Gly	Pro	Leu	Ala
				85					90					95	
Glu	He	Glu	Phe	Trp	Arg	Glu	Arg	Asn	Ala	Thr	Leu	Ser	Ala	Leu	His
			100					105					110		
Glu	G1n	Thr	Lys	Leu	Pro	lle	Val	Arg	Lys	Val	Leu	Asp	Va]	He	Lys
		115					120					125			
Glu		Asp	Ser	Met	Leu		Ala	Asn	Leu	Gln		Val	Phe	Thr	Glu
	130					135		_			140				
_	Phe	Lys	Phe	His		Glu	Ala	Ser	Asp		Val	Arg	Phe	Leu	
145		0.1		m	150				mı	155	0.1		0.1	D.	160
Thr	Val	Glu	Arg		Phe	Lys	Asn	He		His	Gly	Ser	Gly		His
V 1	V 3	1	Α	165	тт.	D	A 7 .	Maa	170	C	A T	1	A	175	V - 1
vai	vai	Leu		Inr	116	Pro	Ala		мет	ser	Ala	Leu		Met	vai
Tun	110	116	180 Sor	Λκα	llic	Tur	Aen	185	Acn	Clu	Ana	Mot	190	Dro	Lou
11 b	116	195	361	MIG	1112	1 1/1	200	LyS	nsp	oru	Arg	Met 205	116	110	Leu
Mot	Glu		Tlα	Λla	Trn	Glu		Δla	Glu	Ara	Val	.Cys	Δησ	Val	Val
MC t	210	ni g	.1 .1 C	MIG	пр	215		Ma	Olu	m g	220		ni g	141	741
Asn		Arg	Thr	Leu	Phe			Asn	Arg	Ala	Ser	Ala	Gln	Ser	Lvs
225		6			230				0	235					240
	Leu	Glu	Ala	Arg		Thr	Leu	Arg	Leu		Lys	Lys	Ala	Tyr	
				245				Ū	250	·	•	-		255	
Asp	Thr	Arg	Ala	Lys	He	Glu	Ala	Ser	Gly	Arg	Glu	Asp	Arg	Trp	G1u
			260					265					270		
Phe	Asp	Arg	Lys	Arg	Leu	Phe	Glu	Arg	Thr	Asp	Tyr	Met	Ala	Thr	He
		275					280					285			
Cvs	GIn	Asp	Leu	Ser	Asp	Val	Leu	Gln	Val	Leu	Glu	Glu	Phe	Tvr	Asn

	290					295					300				
He	Phe	Gly	Pro	Glu	Leu	Lys	Ala	Val	Thr	Gly	Asp	Pro	Lys	Arg	He
305					310					315					320
Asp	Asp	Val	Leu	Cys	Arg	Val	Asp	Gly	Leu	Val	Thr	Pro	Met	Glu	Asn
				325					330					335	
Leu	Thr	Phe	Asp	Pro	Phe	Ser	lle	Lys	Ser	Ser	Gln	Phe	Trp	Lys	Tyr
			340					345					350		
Val	Met	Asp	Glu	Phe	Lys	lle	Glu	Val	Leu	He	Asp	lle	lle	Asn	Lys
		355					360					365			
lle	Phe	Val	G1n	Asn	Leu	Glu	Asn	Pro	Pro	Leu	Tyr	Lys	Asn	His	Pro
	370					375					380				
Pro	Val	Ala	Gly	Ala	He	Tyr	Trp	Glu	Arg	Ser	Leu	Phe	Phe	Arg	He
385					390					395					400
Lys	His	Thr	11e	Leu	Arg	Phe	Gln	Glu	Val	Gln	Glu	He	Leu	Asp	Ser
				405					410					415	
Asp	Arg	Gly	Gln	Glu	Val	Lys	Gln	Lys	Tyr	Leu	Glu	Val	Gly	Arg	Thr
			420					425					430		
Met	Lys	Glu	Tyr	Glu	Asp	Arg	Lys	Tyr	Glu	Gln	Trp	Met	Glu	Val	Thr
		435					440					445			
G] u	Gln	Val	Leu	Pro	Ala	Leu	Met	Lys	Lys	Ser	Leu	Leu	Thr	Lys	Ser
	450					455					460				
Ser	He	Ala	Thr	Glu		Pro	Ser	Thr	Leu	Glu	Arg	Gly	Ala	Val	
465					470					475					480
Ala	He	Asn	Phe		Pro	Ala	Leu	Arg		lle	He	Asn	Glu		Lys
			~ •	485					490					495	
Tyr	Leu	GIu		Leu	Gly	Phe	Thr		Pro	GIu	Leu	Ala		Asn	Val
. 1	,	61	500		,	Di	,	505	T	T)		0.1	510	6.1	
Ala	Leu		61u	Asp	Lys	Phe		Arg	lyr	Ihr	Ala		11e	GIn	Arg
)		515	11.	т		м.	520	11	C.I.	TI	,	525	4	4.7	C1
мет		Asp	H1S	lyr	HIS	Met	Leu	116	61 y	inr		ASI	Asp	Ala	GIU
C	530	1	1	Luc	A	535	Com	Cl.	C1	1	540	A 12 ~	Via 1	Dha	A 22 cr
	vaı	Leu	Leu	Lys		His	261.	6111	GJU		Leu	AIg	vai	гпе	
545	C1 v	Tyrs	Lvc	۸	550	Acr	Twr	Acr	Son	555	61	11.	61	٨٥٠	560
⊃61.	Oly	1 7 1	LyS	565	Leu	Asn	пр	ASII	570	Leu	GIA	116	OIY	575	1 y 1
He	Thr	Glv	Cvs		Gla	Ala	مال	Glv		Phe	Glu	Ser	Len		Hie

			580					585					590		
Gln	Ile	His	Lys	Asn	Ala	Asp	Asp	lle	Ser	Ser	Arg	Leu	Thr	Leu	He
		595					600					605			
Glu	Ala	He	Asn	Leu	Phe	Lys	Tyr	Pro	Ala	Ala	Lys	Ser	Glu	Glu	Glu
	610					615					620				
Leu	Pro	Gly	Val	Lys	Glu	Phe	Phe	Glu	His	Ile	Glu	Arg	Glu	Arg	Ala
625					630					635					640
Ser	Asp	Val	Asp	His	Met	Val	Arg	Trp	Tyr	Leu	Ala	lle	Gly	Pro	Leu
				645					650					655	
Leu	Thr	Lys	Val	Glu	Gly	Leu	Val	Val	His	Thr	Asn	Thr	Gly	Lys	Ala
			660					665					670		
Pro	Lys	Leu	Ala	Ser	Tyr	Tyr	Lys	Tyr	Trp	Glu	Lys	Lys	lle	Tyr	${\tt Glu}$
		675					680					685			
Val	Leu	Thr	Lys	Leu	He	Leu	Lys	Asn	Leu	Gln	Ser	Phe	Asn	Ser	Leu
	690					695					700				
lle	Leu	Gly	Asn	Val	Pro	Leu	Phe	His	Thr	Glu	Thr	Ile	Leu	Thr	Ala
705					710					715					720
Pro	Glu	lle	He	Leu	His	Pro	Asn	Thr	Asn	Glu	Ile	Asp	Lys	Met	Cys
				725					730					735	
Phe	His	Cys	Val	Arg	Asn	Cys	Val	Glu	He	Thr	Lys	His	Phe	Val	Arg
			740					745					750		
Trp	Met	Asn	Gly	Ser	Cys	He	Glu	Cys	Pro	Pro	Gln	Lys	Gly	Glu	Glu
		755					760					765			
Glu	Glu	Val	Val	He	He	Asn	Phe	Tyr	Asn	Asp	He	Ser	Leu	Asn	Pro
	770					775					780				
Gln	He	He	Glu	Gln	Ala	Val	Met	He	Pro	Gln	Asn	Val	His	Arg	Ile
785					790					795					800
Leu	He	Asn	Leu	Met	Lys	Tyr	Leu	Gln		Trp	Lys	Arg	Tyr		Pro
				805					810					815	
Leu	Trp	Lys		Asp	Lys	Ala	lle	Val	Met	Glu	Lys	Phe	Ala	Ala	Lys
			820					825					830		
Lys	Pro		Cys	Val	Ala	Tyr	Asp	Glu	Lys	Leu	Gln		Tyr	Ser	Lys
		835					840					845			
He		Tyr	Glu	Val	Met	Arg	His	Pro	Leu	He		Asp	Glu	His	Cys
	850					855					860				
110	Ara	Lan	G1n	Lau	Ara	Hic	Lan	Δla	Aen	Thr	Val	Gln	G1u	Acn	Ala

Lys Ser Trp Val 11e Ser Leu Gly Lys Leu Leu Asn Glu Ser Ala Lys Glu Glu Leu Tyr Asn Leu His Glu Glu Met Glu Val Leu Asn Arg Cys Val <210> 3331 <211> 166 <212> PRT <213> Homo sapiens <400> 3331 Met Leu Leu Pro Phe Ile Arg Thr Leu Pro Leu Leu Cys Tyr Asn His Leu Leu Val Ser Pro Asp Ser Ala Thr Leu Ser Pro Pro Tyr Ser Leu Glu Lys Met Thr Asp Leu Val Ala Val Trp Asp Val Ala Leu Ser Asp Gly Val His Lys Ile Glu Phe Glu His Gly Thr Thr Ser Gly Lys Arg Val Val Tyr Val Asp Gly Lys Glu Glu Ile Arg Lys Glu Trp Met Phe Lys Leu Val Gly Lys Glu Thr Phe Tyr Val Gly Ala Ala Lys Thr Lys Ala Thr lle Asn lle Asp Ala lle Ser Gly Phe Ala Tyr Glu Tyr Thr Leu Glu lle Asn Gly Lys Ser Leu Lys Lys Tyr Met Glu Asp Arg Ser Lys Thr Thr Asn Thr Trp Val Leu His Met Asp Gly Glu Asn Phe Arg lle Val Leu Glu Lys Asp Ala Met Asp Val Trp Cys Asn Gly Lys Lys

Leu Glu Thr Ala Val Ser

165

<210> 3332

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3332

Met Leu Trp Tyr Glu Leu Pro Gly Tyr Leu Arg Leu Pro Cys Lys Gln

1 5 10 15

Leu Trp Pro Asp Trp Val Pro Gly Arg Gly Gln Gln Thr Lys Glu Cys
20 25 30

Ser Val Gly Pro Ala Ser Ser Asp Leu Gln Asp His Pro Ala Glu 11e 35 40 45

Arg Pro Asn Ser Ser Arg Arg Ala Lys Val Ser Tyr Gly Arg Gln Leu 50 55 60

Ser Leu Glu Lys Trp Pro Ser Leu Ala Thr Leu Tyr Tyr Arg Cys Ser 65 70 75 80

Cys Thr Lys Pro Ser Gly His His Met Ser Trp Leu Ala Ala Leu Ser 85 90 95

Leu Cys Leu Ser Ser Gly Gly Cys 11e Ser Glu Arg Cys Arg Ser Ala 100 105 110

lle Thr Gln Cys Ser Gln Pro Arg Met Glu Asp Leu Tyr Phe Trp Pro 115 120 125

Ser

<210> 3333

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3333

Met Pro Cys Thr Pro Pro Pro Pro Pro Pro Pro His Ile Arg Leu Ala

1				5					10					15	
Ala (Gly	Ser	Leu	Glu	Ala	Ala	Arg	Leu	Thr	Pro	Pro	Arg	Gly	Pro	Gly
			20					25					30		
Pro 1	Met	Ala	Gly	He	Arg	Ser	Arg	Pro	Pro	Ala	Cys	Thr	Ser	Glu	Gln
		35					40					45			
Arg (Gln	Ala	Gln	Leu	Ala	Ala	Thr	His	Pro	Pro	Leu	Ala	Ala	Gly	Arg
	50					55					60				
Pro (Cys	Ser	Val	Ser	Trp	Ser	Phe	Pro	Arg	Pro	Cys	Gly	Pro	Leu	Thr
65					70					75					80
Ala l	Pro	Leu	Leu	Cys	Leu	His	Arg	Ser	Leu	Arg	Ala	Leu	Leu	Leu	Ala
				85					90					95	
Ser	Ala	Pro	His	Thr	Ser	Ala	Ala	Ala	Trp	Cys	Arg	Thr	Leu	G1 y	Arg
			100					105					110		
Tyr 1	Pro		Pro												
		115													
<210															
<211															
<212															
<213	> Hc	omo s	sapi	ens											
(400		20.4													
<400					C	4.1	C	D		C	D	1)		Δ.	Α.
Met .	Ala	Asn	Arg	_	ser	Ala	Ser	Pro		ser	Pro	Pro	Arg		Arg
1	C		C I	5	n.	TI	V 1	,	10 D:	1	۸.	1	11.	15	A 1 .
Arg	Cys	Leu		ыу	rro	inr	vai		Pro	Leu	Arg	Lys		HIS	Ala
61	<i>C</i> .	т	20	D	61	n	D	25	۸	112 -	D	Λ	30	1	112 -
Gly (Cys		61 À	rro	GIN	Pro		HIS	Arg	HIS	Pro		Pro	Leu	nis
Tl	V ~ 1	35	1	Dua	Can	Daga	40	Tl. v.	Lau	1	Duo	45	Dwo	C1	Aan
Thr		5er	Leu	Pro	ser		ASI	ınr	Leu	Leu		61 N	rro	GTY	ASP
Dane 1	50	Mat	C L.	Aan	Т.,,,,	55	Carn	Cl.	Can	Cl	60	C1n	A .215	Cla	Ana
Pro	пр	мет	Giu	ASP		ATa	261.	GIII	Ser		Arg	GIII	ASP	OIII	
65 Vol. 4	C	C 1	ย: -	Tl- •	70 Cua	V = 1	D	A 1 ~	Λ	75 Mat	Desa	C1.	Λ ~~~	Desc	80
val (Cys	61 U	шѕ		CYS	Val	110	ита		Me t	1.10	OID	asp		wig
Acn	A 1 ^	Dro	A1.		V_{c} , 1	The	Т	Cvic		Sam	Т.,,,,	Lev	C1		Two
Asp .	Ala	Pro	Ala	85 Pro	Val	Thr	Trp	Cys	90 Gln	Ser	Tyr	Leu	Gly	95 Asn	Trp

Pro Phe Trp Phe Arg Val Asn Trp Glu Val Lys Pro Leu Gly Phe Val Glu Lys Arg Thr Val Arg Glu Met Leu Cys His Leu Val Arg Lys Thr Phe Phe Leu Ser Ser Lys Ile Met Met Gly Phe Phe Trp Ile Cys Phe Thr Asn Lys Ser Asp Trp Ser lle

<210> 3335

<211> 343

<212> PRT

<213> Homo sapiens

<400> 3335

Met Val Thr Gly Arg Arg Glu Asp Val Ala Thr Ala Arg Arg Glu Ile lle Ser Ala Ala Glu His Phe Ser Met lle Arg Ala Ser Arg Asn Lys Ser Gly Ala Ala Phe Gly Val Ala Pro Ala Leu Pro Gly Gln Val Thr lle Arg Val Arg Val Pro Tyr Arg Val Val Gly Leu Val Val Gly Pro Lys Gly Ala Thr lle Lys Arg lle Gln Gln Gln Thr Asn Thr Tyr lle lle Thr Pro Ser Arg Asp Arg Asp Pro Val Phe Glu lle Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu He Glu Thr His He Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn Asn Glu Asn Asp Phe Leu

Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser Arg Tyr Ser Asp Ala Trp

Arg Val His Gln Pro Gly Cys Lys Pro Leu Ser Thr Phe Arg Gln Asn

145					150					155					160
Ser	Leu	Gly	Cys	Ile	Gly	${\sf Glu}$	Cys	Gly	Val	Asp	Ser	Gly	Phe	Glu	Ala
				165					170					175	
Pro	Arg	Leu	Gly	Glu	Gln	Gly	Gly	Лsp	Phe	Gly	Tyr	Gly	Gly	Tyr	Leu
			180					185					190		
Phe	Pro	Gly	Tyr	Gly	Val	Gly	Lys	Gln	Asp	Val	Tyr	Tyr	Gly	Val	Ala
		195					200					205			
Glu	Thr	Ser	Pro	Pro	Leu	Trp	Ala	G1 y	Gln	Glu	Asn	Ala	Thr	Pro	Thr
	210					215					220				
Ser	Val	Leu	Phe	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ala	Lys
225					230					235					240
Ala	Arg	Ala	Gly	Pro	Pro	Gly	Ala	His	Arg	Ser	Pro	Ala	Thr	Ser	Ala
				245					250					255	
Gly	Pro	Glu	Leu	Ala	Gly	Leu	Pro	Arg	Arg	Pro	Pro	Gly	Glu	Pro	Leu
			260					265					270		
Gln	Gly	Phe	Ser	Lys	Leu	Gly	Gly	Gly	Gly	Leu	Arg	Ser	Pro	Gly	Gly
		275					280					285			
Gly	Arg	Asp	Cys	Met	Val	Cys	Phe	Glu	Ser	Glu	Val	Thr	Ala	Ala	Leu
	290					295					300				
Val	Pro	Cys	Gly	His	Asn	Leu	Phe	Cys	Met		Cys	Ala	Val	Arg	
305					310					315					320
Cys	Glu	Arg	Thr	Asp	Pro	Glu	Cys	Pro		Cys	His	He	Thr		Thr
				325					330					335	
Gln	Ala	lle	Arg	He	Phe	Ser									
			340												

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3336

Met Asp Ala Ala Val Thr Asp Asp Phe Gln Gln lle Leu Pro lle Glu

1 5 10 15

Gln Leu Arg Ser Thr His Ala Ser Asn Asp Tyr Val Glu Arg Pro Pro

25 20 30 Ala Pro Cys Lys Gln Ala Leu Ser Ser Pro Ser Leu 11e Val Gln Thr 40 45 His Lys Ser Asp Trp Ser Leu Ala Thr Met Pro Thr Ser Leu Pro Arg 50 55 60 Ser Leu Ser Gln Cys His Gln Leu Gln Pro Leu Pro Gln His Leu Ser 70 75 Gln Ser Ser Ile Ala Ser Ser Met Ser His Ser Thr Thr Ala Ser Ser 85 90 Thr Thr Ala Pro Leu Met Met Lys Thr Thr Val Leu Met Ser Pro Ala 105 110 Leu Val Gly Leu Val Leu Ala Leu Ser Ala Gly Gln Pro 120

<210> 3337

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3337

Met Cys Val Tyr Thr Tyr lle Cys Glu Tyr Arg Cys lle Tyr Val Cys 1 5 10 15

lle Tyr Ile His Val Phe Val Tyr Val Cys Tyr Ile Tyr Leu Tyr Val
20 25 30

Tyr Val Cys Val Ile Tyr Ile His Val Cys Val Cys Val Cys Val Leu
35 40 45

Tyr lle His Val Cys Val Tyr Val Cys Val Tyr Ala Leu Arg Arg Gln 50 55 60

Asn Cys Pro Glu Glu Gly Trp Tyr Leu Gly Phe Pro Ser Pro Ser Leu
65 70 75 80

Cys His Leu Val Pro Asn Arg Ala Asn Gly Pro Ser Leu Gln Thr Glu 85 90 95

Ala Glu Ser Pro Gly Leu Gly Arg Gly Asp Arg Gly Thr Gly Gln Pro
100 105 110

Gln Trp Gly Thr Gly Asp Pro Gly Leu His Pro Asn Thr Gly Thr Arg

Asp Arg Cys His Glu Leu Leu Leu Leu Glu Pro Ser Ala Gln Gly Ser Gly Leu Tyr Pro <210> 3338 <211> 172 <212> PRT <213> Homo sapiens <400> 3338 Met Asn Ala Val Gly Cys Cys Gly Leu Gln Leu Tyr Lys Phe Gly Glu Thr Val Ser Ile Val Phe Trp Thr Asp Thr Trp Arg Pro Glu Ser Phe Phe Asp Lys Val Lys Lys Asn Arg Gln Asn Gly Met His Thr Leu Cys Leu Leu Asp Ile Lys Val Lys Glu Gln Ser Leu Glu Asn Leu 11e Lys Gly Arg Lys Ile Tyr Glu Pro Pro Arg Tyr Met Ser Val Asn Gln Ala Ala Gln Gln Leu Leu Glu 11e Val Gln Asn Gln Arg 11e Arg Gly Glu Glu Pro Ala Val Thr Glu Glu Thr Leu Cys Val Gly Leu Ala Arg Val Gly Ala Asp Asp Gln Lys Ile Ala Ala Gly Thr Leu Arg Gln Met Cys Thr Val Asp Leu Gly Glu Pro Leu His Ser Leu 11e 11e Thr Gly Gly Ser Ile His Pro Met Glu Met Glu Met Leu Ser Leu Phe Ser Ile Pro Glu Asn Ser Ser Glu Ser Gln Ser 11e Asn Gly Leu

<210> 3339 ⟨211⟩ 135 <212> PRT <213> Homo sapiens <400> 3339 Met His Leu Thr Ser Pro Pro Val Leu Arg Thr Pro Cys Cys Ser Gly 5 1 10 15 His Arg Val Ser Gln Gln Trp His 11e Asp Thr Trp Ala Arg Glu Phe 25 Phe Ala Ala Gly Gly Gly Gly Pro Val Cys Cys Arg Leu Leu Cys 40 Gly Ser Phe Ser Leu Cys Pro Leu Ile Glu Ala Pro Leu Pro Trp Leu 50 55 60 Gln Pro Lys Met Ser Pro Asp Ile Ala Lys Cys Pro Gly Ala Gly Ala 75 70 Arg Gly Thr Met Ser Pro Leu Thr His Leu Glu Asn His Cys Tyr Lys 85 90 Arg Thr Gly Thr Ala Lys Glu Ala lle lle Ser Arg Lys Ser Cys Cys 105 Arg Phe Ser Leu Asn Lys Gly Val Ser Ile Leu Arg Asn Pro Pro Lys 120 125 Asp Cys Trp Pro Ser Leu Ser 130 135 <210> 3340

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3340

Met Phe Ser Ile Thr Leu Ile Asn His Phe Asp Leu Ser Ile Leu Ile

1 5 10 15

Thr Thr Met Val Leu Val Pro Ser Tyr Thr Leu Leu Gly Phe Lys Thr

			20					25					30		
Phe	Leu	Glu	Va]	Arg	Asp	G1n	Glu	His	Tyr	Arg	Glu	Phe	Pro	Glu	Ala
		35					40					45			
Asn	Phe	Glu	Leu	Ser	Ala	Thr	Asp	Phe	Leu	Val	Cys	Phe	11e	Pro	Tyr
	50		,			55					60				
Phe	Gln	Thr	Leu	Leu	Phe	Val	Phe	Val	Leu	Arg	Cys	Met	Glu	Leu	Lys
65					70					75					80
Cys	Gly	Lys	Lys	Arg	Met	Arg	Lys	Asp	Pro	Val	Phe	Arg	Ile	Ser	Pro
				85					90					95	
Gln	Ser	Arg	Asp	Ala	Lys	Pro	Asn	Pro	Glu	Glu	Pro	He	Asp	Glu	Asp
			100					105					110		
Glu	Asp	lle	Gln	Thr	Glu	Arg	lle	Arg	Thr	Ala	Thr	Ala	Leu	Thr	Thr
		115					120					125			
Ser	He	Leu	Asp	Glu	Lys	Pro	Val	He	lle	Ala	Ser	Cys	Leu	His	Lys
	130					135					140				
Glu	Tyr	Ala	Gly	Gln	Lys	Lys	Ser	Cys	Phe	Ser	Lys	Arg	Lys	Lys	Lys
145					150					155					160
lle	Ala	Ala	Arg		Ile	Ser	Phe	Cys		Gln	Glu	Gly	Glu		Leu
				165					170					175	
Gly	Leu	Leu		Pro	Asn	Gly	Ala		Lys	Ser	Ser	Ser		Arg	Met
	_		180					185					190		
He	Ser		He	Thr	Lys	Pro		Ala	Gly	Glu	Val		Leu	Lys	Gly
		195			0.1		200	<i>a</i> 1	m.	0	ъ	205	0.1		
Cys		Ser	Val	Leu	Gly		Leu	Gly	lyr	Cys		GIn	Glu	Asn	Val
,	210	D	м.		TI.	215	Α.	C1	11.2	1	220	W . T	Т	A 1 -	۸1.
	ırp	Pro	met	Leu	Thr 230		Arg	61u	ms	235		vai	lyr	АТА	
225	1	C1	Lau	A 22.00			Aan	Ala	A 200 cm			110	A 1 o	A 200 cr	240
vai	Lys	бту	Leu	245	Lys	мта	ASP	мта	250	Leu	мла	116	нта	255	Leu
Val	Son	Ala	Dho		Leu	Hic	Chu	Cln		Acn	Va 1	Dro	Vo.1		Lvc
vai	261	піа	260	Lys	Leu	1113	oru	265	Leu	nsn	vai	110	270	0111	Lyo
l en	Thr	Ala		He	Thr	Aro	Lve		Cvs	Phe	Val	Len		l eu	Len
1.CU	1111	275	O1 y	110	1 111	n g	280	LCU	Oy 3	1 110	, (1)	285	001	Leu	15 C (1
G1 v	Asn		Pro	Val	Leu	Len		Asn	Glu	Pro	Ser		Glv	He	Asp
V.1.7	290	~ ~ 3			200	295		درد	V.u		300		a y		
Pro		Glv	Gln	Gln	Gln		Trp	Gln	Ala	Ile		Ala	Val	Val	Lvs

305					310					315					320
Asn	Thr	Glu	Arg	Gly	Val	Leu	Leu	Thr	Thr	His	Asn	Leu	Ala	Glu	Ala
				325					330					335	
Glu	Ala	Leu	Cys	Asp	Arg	Val	Ala	lle	Met	Val	Ser	Gly	Arg	Leu	Arg
			340					345					350		
Cys	He	Gly	Ser	He	Gln	His	Leu	Lys	Asn	Lys	Leu	Gly	Lys	Asp	Tyr
		355					360					365			
He	Leu	Glu	Leu	Lys	Val	Lys	Glu	Thr	Ser	Gln	Val	Thr	Leu	Val	His
	370					375					380				
Thr	Glu	Ile	Leu	Lys	Leu	Phe	Pro	Gln	Ala	Ala	Gly	Gln	Glu	Arg	Tyr
385					390					395					400
Ser	Ser	Leu	Leu	Thr	Tyr	Lys	Leu	Pro	Val	Ala	Asp	Val	Tyr	Pro	Leu
				405					410					415	
Ser	Gln	Thr	Phe	His	Lys	Leu	Glu	Ala	Val	Lys	His	Asn	Phe	Asn	Leu
			420					425					430		
Gly	Glu	Tyr	Ser	Leu	Ser	Gln	Cys	Thr	Leu	Glu	Lys	Val	Phe	Leu	Glu
		435					440					445			
Leu	Ser	Lys	Glu	Gln	Glu	Val	Gly	Asn	Phe	Asp	Glu	Glu	He	Asp	Thr
	450					455					460				
Thr	Met	Arg	Trp	Lys	Leu	Leu	Pro	His	Ser	Asp	Glu	Pro			
465					470					475					

<211> 181

<212> PRT

<213> Homo sapiens

⟨400⟩ 3341

50 55 60 Thr Ser Pro Ala Thr His Ser Ser Gly Ser Arg Ala Pro Pro Pro Gln 70 75 Gln Gln Ser Ser Arg Asp Leu Pro Gln Gly Arg Ser Pro Ala Pro Gly 85 90 Trp Lys Ala Ala Glu Leu Trp Arg Arg Gly Thr Gln Arg Thr Ala Gly 105 Arg Ala Cys Pro Arg Leu Pro Ala Arg Pro Glu Gly Ser Ala Arg Ser 115 120 125 Lys Asn Gln Lys Ser Ser Met Arg Ser Pro Ala Gly Arg Arg Gly Val 135 Ala Gln Pro Val Leu Ile Leu Ser Trp Arg Lys Pro Ser Gly Arg Val 150 155 Leu Gly Arg Thr Arg Leu Pro Pro Arg Leu Leu Ser Ala Ala Cys Pro 165 170 175 Ala Arg Thr Ser Val 180

<210> 3342

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3342

Met Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser 1 5 10 15

Ser Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly 11e Thr Gly Met
20 25 30

Ser His Cys Ala Trp Thr Ile Phe Thr Phe Phe Glu Thr Glu Ser

35
40
45

Cys Ser Val Thr Gln Thr Glu Val Gln Trp Arg Arg Leu Gly Ser Leu 50 55 60

Gln Ala Pro Leu Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu Pro 65 70 75 80

Asn Ser Trp Asp Tyr Arg Arg Pro Pro Pro Phe Leu Ala Asn Phe Phe

85 90 95 Val Phe Leu Val Ala Met Gly Phe His His Val Ser Gln Asp Gly Leu 100 105 110 Asp Ile Leu Thr Ser 115 <210> 3343 <211> 128 <212> PRT <213> Homo sapiens <400> 3343 Met Cys His His Ala Trp Leu Ile Phe Ile Phe Leu Val Glu Thr Gly 1 5 10 15 Phe His His Val Val Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp 25 Leu Pro Thr Ser Ala Ser Gln Gly Ala Gly Ile Thr Gly Met Ser His 35 40 45 His Ala Trp Pro Phe Leu Thr Leu Leu Tyr Asp Met Pro Ile Ala Ser 55 Leu Arg Ala Ser Val Pro Cys Tyr Phe Thr Leu Gly Phe Arg Trp Arg 70 75 Glu Gln Leu Leu Phe Gly Thr Leu Ala lle Ala Trp Gln Met Gly Ile 85 90 95 Cys His Phe Cys Ser Tyr Leu Val Gly Ser Thr Ile Thr Phe Arg Ala 105

Asn Pro Ala Ala Lys Pro Gly Ile Asn Arg Ala Glu Lys Tyr lle Leu

120

125

<210> 3344

<211> 752

<212> PRT

<213> Homo sapiens

<400)> 33	344													
Met	Glu	Thr	Val	Val	Ala	Gly	Gly	Ser	Gly	Gly	Asp	Gly	Glu	Glu	Glu
1				5					10					15	
Glu	Glu	Λla	Leu	Pro	Glu	Gln	Ser	Glu	Gly	Lys	Glu	Gln	Lys	He	Leu
			20					25					30		
Leu	Asp	Thr	Ala	Cys	Lys	Met	Val	Arg	Trp	Leu	Ser	Ala	Lys	Leu	Gly
		35					40					45			
Pro	Thr	Val	Ala	Ser	Arg	His	Val	Ala	Arg	Asn	Leu	Leu	Arg	Leu	Leu
	50					55					60				
Thr	Ser	Cys	Tyr	Val	Gly	Pro	Thr	Arg	Gln	Gln	Phe	Thr	Val	Ser	Ser
65					70					75					80
G1 y	Glu	Ser	Pro	Pro	Leu	Ser	Ala	Gly	Asn	lle	Tyr	Gln	Lys	Arg	Pro
				85					90					95	
Val	Leu	Gly	Asp]]e	Val	Ser	Gly	Pro	Val	Leu	Ser	Cys	Leu	Leu	His
			100					105					110		
He	Ala	Arg	Leu	Tyr	Gly	Glu	Pro	Val	Leu	Thr	Tyr	Gln	Tyr	Leu	Pro
		115					120					125			
Tyr	Ile	Ser	Tyr	Leu	Val	Ala	Pro	Gly	Ser	Ala	Ser	Gly	Pro	Ser	Arg
	130					135					140				
Leu	Asn	Ser	Arg	Lys	Glu	Ala	Gly	Leu	Leu	Ala	Ala	Val	Thr	Leu	Thr
145					150					155					160
Gln	Lys	He	lle	Val	Tyr	Leu	Ser	Asp	Thr	Thr	Leu	Met	Asp	Ile	Leu
				165					170					175	
Pro	Arg	He		His	Glu	Val	Leu		Pro	Val	Leu	Ser	Phe	Leu	Thr
			180			_	_	185					190		
Ser	Leu		Thr	Gly	Phe	Pro		GIy	Ala	GIn	Ala		Thr	He	Leu
0	., .	195	Tr.)		C	,	200	4.7	,		0	205		7.7	0.1
Cys		Lys	Ihr	11e	Ser		11e	Ala	Leu	11e		Leu	Arg	11e	61 y
C1	210	U. a	V 1	C1	C1	215	1	C	C1	Dana	220 V-1	۸1	Tl	Dl. a	DL ~
225	GIU	we t	vai	GIN	230	піѕ	Leu	ser	GIU	235	vai	мта	Thr	rne	240
	Val	Pho	Sor	Gln		Hic	Glu	Lou	Ara		Gln	Aen	Leu	lve	
9111	, а ј	THE	961	245	ı,cu	1113	OTU	Leu	250	0111	0111	пэр	Leu	255	Leu
Asp	Pro	Ala	Glv		Glv	Glu	Glv	Gln		Pro	Gln	Val	Val		Ser
- 1-			260	3	,			265					270		

Asp	Gly	Gln	Gln	Arg	Pro	Val	Asp	Pro	Ala	Leu	Leu	Asp	Glu	Leu	Gln
		275					280					285			
Lys	Val	Phe	Thr	Leu	Glu	Met	Ala	Tyr	Thr	Пе	Tyr	Val	Pro	Phe	Ser
	290					295					300				
Cys	Leu	Leu	G1 y	Asp	He	He	Arg	Lys	He	lle	Pro	Asn	His	Glu	Leu
305					310					315					320
Val	Gly	Glu	Leu	Ala	Ala	Leu	Tyr	Leu	Glu	Ser	lle	Ser	Pro	Ser	Ser
				325					330					335	
Arg	Asn	Pro	Ala	Ser	Val	Glu	Pro	Thr	Met	Pro	Gly	Thr	Gly	Pro	Glu
			340					345					350		
Trp	Asp	Pro	His	Gly	Gly	Gly	Cys	Pro	Gln	Asp	Asp	Gly	His	Ser	Gly
		355					360					365			
Thr	Phe	Gly	Ser	Val	Leu	Val	Gly	Asn	Arg	He	Gln	He	Pro	Asn	Gly
	370					375					380				
Ser	Arg	Pro	Glu	Asn	Pro	Gly	Pro	Leu	Gly	Pro	He	Ser	Gly	Val	Gly
385					390					395					400
Gly	Gly	Gly	Leu	Gly	Ser	Gly	Ser	Asp	Asp	Asn	Ala	Leu	Lys	Gln	Glu
				405					410					415	
Leu	Pro	Arg	Ser	Val	His	Gly	Leu	Ser	Gly	Asn	Trp	Leu	Ala	Tyr	Trp
			420					425					430		
Gln	Tyr	Glu	He	Gly	Val	Ser	Gln	Gln	Asp	Ala	His	Phe	His	Phe	His
		435					440					445			
Gln	He	Arg	Leu	Gln	Ser	Phe	Pro	Gly	His	Ser	Gly	Ala	Val	Lys	Cys
	450					455					460				
Val	Ala	Pro	Leu	Ser	Ser	Glu	Asp	Phe	Phe	Leu	Ser	Gly	Ser	Lys	Asp
465					470					475					480
Arg	Thr	Va]	Arg	Leu	Trp	Pro	Leu	Tyr	Asn	Tyr	Gly	Asp	Gly	Thr	Ser
				485					490					495	
Glu	Thr	Ala	Pro	Arg	Leu	Val	Tyr	Thr	Gln	His	Arg	Lys	Ser	Val	Phe
			500					505					510		
Phe	Val	Gly	GIn	Leu	Glu	Ala	Pro	Gln	His	Val	Val	Ser	Cys	Asp	Gly
		515					520					525			
Ala	Val	His	Va]	Trp	Asp	Pro	Phe	Thr	Gly	Lys	Thr	Leu	Arg	Thr	Val
	530	•				535					540				
Glu	Pro	Leu	Asp	Ser	Arg	Val	Pro	Leu	Thr	Ala	Val	Ala	Val	Met	Pro
545					550					555					560

Ala Pro His Thr Ser lle Thr Met Ala Ser Ser Asp Ser Thr Leu Arg Phe Val Asp Cys Arg Lys Pro Gly Leu Gln His Glu Phe Arg Leu Gly Gly Gly Leu Asn Pro Gly Leu Val Arg Ala Leu Ala Ile Ser Pro Ser Gly Arg Ser Val Val Ala Gly Phe Ser Ser Gly Phe Met Val Leu Leu Asp Thr Arg Thr Gly Leu Val Leu Arg Gly Trp Pro Ala His Glu Gly Asp Ile Leu Gln Ile Lys Ala Val Glu Gly Ser Val Leu Val Ser Ser Ser Ser Asp His Ser Leu Thr Val Trp Lys Glu Leu Glu Gln Lys Pro Thr His His Tyr Lys Ser Ala Ser Asp Pro Ile His Thr Phe Asp Leu Tyr Gly Ser Glu Val Val Thr Gly Thr Val Ser Asn Lys Ile Gly Val Cys Ser Leu Leu Glu Pro Pro Ser Gln Ala Thr Thr Lys Leu Ser Ser Glu Asn Phe Arg Gly Thr Leu Thr Ser Leu Ala Leu Leu Pro Thr Lys Arg His Leu Leu Gly Ser Asp Asn Gly Val 11e Arg Leu Leu Ala

<210> 3345

<211> 805

<212> PRT

<213> Homo sapiens

<400> 3345

Met Ala Arg Leu His Glu His Leu Lys Tyr Phe Val Asn Met Lys Ile 1 5 10 15 Ser Thr Asp Lys Ser Trp Gln Gly Val Thr Ile Tyr Phe Ser Gly His 20 25 30

Glu	Thr	Pro	Gly	Glu	Gly	Glu	His	Lys	Пe	Met	Glu	Phe	He	Arg	Ser
		35					40					45			
Głu	Lys	Ala	Lys	Pro	Asp	His	Asp	Pro	Asn	Thr	Arg	His	Cys	Leu	Tyr
	50					55					60				
Gly	Leu	Asp	Ala	Asp	Leu	11e	Met	Leu	Gly	Leu	Thr	Ser	His	G] u	Ala
65					70					75					80
His	Phe	Ser	Leu	Leu	Arg	Glu	Glu	Val	Arg	Phe	Gly	Gly	Lys	Lys	Thr
				85					90					95	
Gln	Arg	Val	Cys	Ala	Pro	Glu	Glu	Thr	Thr	Phe	His	Leu	Leu	His	Leu
			100					105					110		
Ser	Leu	Met	Arg	Glu	Tyr	Ile	Asp	Tyr	Glu	Phe	Ser	Val	Leu	Lys	Glu
		115					120					125			
Lys	He	Thr	Phe	Lys	Tyr	Asp	lle	Glu	Arg	lle	lle	Asp	Asp	Trp	He
	130					135					140				
Leu	Met	Gly	Phe	Leu	Val	Gly	Asn	Asp	Phe	lle	Pro	His	Leu	Pro	His
145					150					155					160
Leu	His	lle	Asn	His	Asp	Ala	Leu	Pro	Leu	Leu	Tyr	Gly	Thr	Tyr	Val
				165					170					175	
Thr	He	Leu	Pro	Glu	Leu	Gly	Gly	Tyr	He	Asn	Glu	Ser	Gly	His	Leu
			180					185					190		
Asn	Leu	Pro	Arg	Phe	Glu	Lys	Tyr	Leu	Val	Lys	Leu	Ser	Asp	Phe	Asp
		195					200					205			
Arg	Glu	His	Phe	Ser	Glu	Val	Phe	Va]	Asp	Leu	Lys	Trp	Phe	Glu	Ser
	210					215					220				
Lys	Val	Gly	Asn	Lys	Tyr	Leu	Asn	Glu	Ala	Ala	Gly	Va]	Ala	Ala	Glu
225					230					235					240
Glu	Ala	Arg	Asn	Tyr	Lys	Glu	Lys	Lys	Lys	Leu	Lys	Gly	Gln	Glu	Asn
				245					250					255	
Ser	Leu	Cys	Trp	Thr	Ala	Leu	Asp		Asn	G] u	G1 y	Glu		He	Thr
			260					265					270		
Ser	Lys	Asp	Asn	Leu	Glu	Asp	Glu	Thr	Glu	Asp	Asp	Asp	Leu	Phe	Glu
		275					280					285			
Thr	G] u	Phe	Arg	GIn	Tyr	Lys	Arg	Thr	Tyr	Tyr	Met	Thr	Lys	Met	Gly
	290					295					300				
Val	Asp	Val	Val	Ser		Asp	Phe	Leu	Ala	Asp	Gln	Ala	Ala	Cys	
305					310					315					320

Val	Gln	Ala	lle		Trp	11e	Leu	His		Tyr	Tyr	His	Gly		Gln
				325					330					335	
Ser	Trp	Ser	Trp	Tyr	Tyr	Pro	Tyr	His	Tyr	Ala	Pro	Phe	Leu	Ser	Asp
			340					345					350		
He	His	Asn	He	Ser	Thr	Leu	Lys	lle	His	Phe	Glu	Leu	Gly	Lys	Pro
		355					360					365			
Phe	Lys	Pro	Phe	Glu	Gln	Leu	Leu	Ala	Val	Leu	Pro	Ala	Ala	Ser	Lys
	370					375					380				
Asn	Leu	Leu	Pro	Ala	Cys	Tyr	Gln	His	Leu	Met	Thr	Asn	Glu	Asp	Ser
385					390					395					400
Pro	Ile	lle	Glu	Tyr	Tyr	Pro	Pro	Asp	Phe	Lys	Thr	Asp	Leu	Asn	Gly
				405					410					415	
Lys	Gln	G1n	Glu	Trp	Glu	Ala	Val	Val	Leu	lle	Pro	Phe	He	Asp	Glu
			420					425					430		
Lys	Arg	Leu	Leu	Glu	Ala	Met	Glu	Thr	Cys	Asn	His	Ser	Leu	Lys	Lys
		435					440					445			
Glu	Glu	Arg	Lys	Arg	Asn	Gln	His	Ser	Glu	Cys	Leu	Met	Cys	Trp	Tyr
	450					455					460				
Asp	Arg	Asp	Thr	Glu	Phe	Ile	Tyr	Pro	Ser	Pro	Trp	Pro	Glu	Lys	Phe
465					470					475					480
Pro	Ala	11e	Glu	Arg	Cys	Cys	Thr	Arg	Tyr	Lys	He	He	Ser	Leu	Asp
				485					490					495	
Ala	Trp	Arg	Val	Asp	Пе	Asn	Lys	Asn	Lys	11e	Thr	Arg	He	Asp	Gln
			500					505					510		
Lys	Ala	Leu	Tyr	Phe	Cys	Gly	Phe	Pro	Thr	Leu	Lys	His	11e	Arg	His
		515					520					525			
Lys	Phe	Phe	Leu	Lys	Lys	Ser	Gly	Val	Gln	Val	Phe	Gln	Gln	Ser	Ser
	530					535					540				
Arg	Gly	Glu	Asn	Met	Met	Leu	Glu	Пе	Leu	Val	Asp	Ala	Glu	Ser	Asp
545					550					555					560
Glu	Leu	Thr	Val	Glu	Asn	Val	Ala	Ser	Ser	Val	Leu	Gly	Lys	Ser	Val
				565					570					575	
Phe	Val	Asn	Trp	Pro	His	Leu	Glu	G] u	Ala	Arg	Val	Val	Ala	Val	Ser
			580					585					590		
Asp	Gly	Glu	Thr	Lys	Phe	Tyr	Leu	Glu	Glu	Pro	Pro	Gly	Thr	Gln	Lys
-		595		•			600					605			

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Leu Tyr Ser Gly Arg Thr Ala Pro Pro Ser Lys Val Val His Leu Gly
                        615
Asp Lys Glu Gln Ser Asn Trp Ala Lys Glu Val Gln Gly Ile Ser Glu
625
                    630
                                         635
                                                             640
His Tyr Leu Arg Arg Lys Gly Ile Ile Ile Asn Glu Thr Ser Ala Val
                645
                                     650
Val Tyr Ala Gln Leu Leu Thr Gly Arg Lys Tyr Gln lle Asn Gln Asn
                                665
Gly Glu Val Arg Leu Glu Lys Gln Trp Ser Lys Gln Val Val Pro Phe
        675
                            680
                                                 685
Val Tyr Gln Thr Ile Val Lys Asp Ile Arg Ala Phe Asp Ser Arg Phe
                        695
                                             700
Ser Asn Ile Lys Thr Leu Asp Asp Leu Phe Pro Leu Arg Ser Met Val
705
                    710
                                         715
                                                             720
Phe Met Leu Gly Thr Pro Tyr Tyr Gly Cys Thr Gly Glu Val Gln Asp
                                     730
                725
Ser Gly Asp Val lle Thr Glu Gly Arg Ile Arg Val lle Phe Ser Ile
                                745
Pro Cys Glu Pro Asn Leu Asp Ala Leu Ile Gln Asn Gln His Lys Tyr
                            760
                                                 765
        755
Ser Ile Lys Tyr Asn Pro Gly Tyr Val Leu Ala Ser Arg Leu Gly Val
                        775
                                             780
Ser Gly Tyr Leu Val Ser Arg Phe Thr Gly Ser Ile Phe Ile Gly Arg
785
                    790
                                         795
                                                             800
Gly Ser Arg Arg Lys
                805
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<211> 108

<212> PRT

<213> Homo sapiens

<400> 3346

Met Tyr Val Val Phe Tyr Ala Asp Arg 11e 11e Gln Lys Asn Ala Leu 1 5 10 15 Lys Ser Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Cys Asp Pro 25 Gly Ser Leu Gln Pro Leu Pro Pro Gly Leu Lys Arg Phe Ser Cys Leu 35 45 Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg Ile Pro Trp Glu His Pro 55 Pro Ala Glu lle Cys Thr Ser Ala Thr lle Leu Ser Gly Arg Arg Lys 70 75 Gly Lys Gly Ser Ala Ala Ser Leu Ala Thr Ala Cys Ile Ile Ser Ser 85 90 95 Gln Arg Arg Ser Thr Gly Ser Gly Ser Phe Arg Ala 100 105

<210> 3347

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3347

Met Pro Val Ile Pro Ala Thr Arg Glu Ala Glu Ala Arg Glu Ser Leu 1 5 10 15

Asp Ser Lys His Ser Phe 11e His 11e Pro 11e His Pro Tyr Thr Tyr
20 25 30

Ser Ser Asn Ser Cys Ser Ser Lys His Pro Ser 11e His Pro Ser 11e
35
40
45

His Pro Ser Ile His Pro Ser Ile Tyr Thr Ser Ile Tyr Pro Phe Met 50 55 60

His Leu Tyr 11e Tyr Leu Leu 11e Lys Phe Leu Ser 11e His Pro Ser 65 70 75 80

Thr Tyr Leu Ser Asn Phe Cys Ser Ser Lys His Pro Pro 11e His Leu 85 90 95

Ser Thr His Pro Ser Ile His Ala Cys Met His Pro Ser Ile His Thr 100 105 110

Tyr Ile His Ser Leu Ile Arg Leu Tyr Thr His Pro Ser Met Tyr Leu 115 120 125 Phe I1e 130

<210> 3348

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3348

Met Ser Lys Leu Ala Val Leu Thr Arg Thr Leu Glu Gly Met Ala Met

1 5 10 15

Glu His Arg Leu Glu Met Val Arg Phe 11e Phe Thr Ser Pro Ala Pro 20 25 30

Leu Asp Lys Val Leu Gly Met Val Arg Ala Tyr Lys Glu Thr Gln Thr
35 40 45

Ala Ile Asn Ile Ser Leu Tyr Asp Ala Met Pro Trp Arg Pro Asn Pro
50 55 60

Pro Leu Leu Phe Phe Phe Phe Phe Leu Thr Gly Ser His Phe Val Thr
65 70 75 80

Gln Ala Gly Val Glu Trp Gly Asp Leu Gly Ser Leu Gln Pro Pro Gln 85 90 95

Pro Pro Gly Leu Lys Pro Ser Ser Cys Leu Ser Pro Pro Ser Ser Trp 100 105 110

Asp Tyr Arg His Ala Pro Ser Cys Leu Ala Ser Phe Phe Phe Phe 115 120 125

Glu Thr Glu Ser Cys Ser Leu Pro Gln Ala Arg Val Gln Trp His Asp 130 135 140

Leu Gly Ser Leu Gln Ala Pro Pro Pro

145 150

<210> 3349

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3349 Met Glu Ile Asp Gly Phe Gln Gln Leu Asp Leu Glu Lys Ser Val Pro l 10 15 Ser Lys Lys Thr Thr Pro Lys Arg lle Ile His Phe Val Asp Gly Asp 25 Ile Met Glu Glu Tyr Ser Thr Glu Glu Glu Glu Glu Glu Glu Lys Glu 40 45 Glu Gln Ser Thr Asn Ser Thr Leu Asp Pro Ser Lys Leu Ser Trp Gly 50 Pro Tyr Leu Arg Phe Trp Ala Gly Arg Ile Ala Ser Thr Ser Phe Ser 70 75 Met Leu Ser Leu Gln Ala Thr Leu Leu Leu Lys Ala Glu Lys Glu Gly 85 90 95 Leu Lys Gln Leu Leu Arg Ser Leu Ser Gly Cys Met Glu Glu Phe Leu 100 105 110 Met Trp Val Leu Val Thr Leu Asp

120

<210> 3350

<211> 120

<212> PRT

<213> Homo sapiens

115

<400> 3350

Met Glu Thr Leu Val Val Trp Lys lle Gln Glu Thr Ser Ile Leu Thr
1 5 10 15

Ile Ile Lys Ile His Met Gly Cys Ala Gln Trp Leu Ser Pro Val Ile 20 25 30

Pro Ala Phe Trp Glu Ala Gly Val Gly Gly Leu Leu Glu Ala Arg Tyr 35 40 45

Ser Arg Pro Ala Trp Gln Pro Gly Glu Ile Pro Cys Ile Gln Lys Ile 50 55 60

Glu Lys Leu Ala Arg Asp Asp Gly Val Arg Leu Trp Ser Gln Leu Leu 65 70 75 80 <210> 3351

<211> 862

<212> PRT

<213> Homo sapiens

<400> 3351 Met Trp Gln Leu Leu Pro Val Glu Gln Asp Thr Ser Asn Val Thr Glu Met Lys Val Ser Glu Lys Ser His Asn Ala Phe Lys Ala Thr Asn Lys Lys Arg Glu Thr Asp Val His Leu Lys Ser Gln Asp Phe Leu Met Lys Thr Asn Thr Ser Thr Gly Leu Lys Met Ala Met Glu Arg Ser Leu Asn Pro Ile Asn Phe Asn Pro Glu Asn Asn Val Lys Glu Ser Glu Cys Pro Leu Pro Pro Pro Pro Pro Pro Pro Pro Pro Ser Asn Ala Ser Ser Glu Ile Glu Phe Pro Leu Pro Pro Pro Pro Pro Leu Met Met Phe Pro Glu Lys Asn Gly Phe Leu Pro Ser Leu Ser Thr Glu Lys Ile Lys Ala Glu Phe Glu Ser Phe Pro Gly Leu Pro Leu Pro Pro Pro Pro Val Asp Glu Lys Ser Glu Arg Glu Ser Ser Ser Met Phe Leu Pro Pro Pro

Pro Pro Thr Pro Ser Gln Lys Pro Ala His Leu Leu Ser Ser Ser Ala

Pro	Glu	Lys	His	Ser	Gly	Asp	Phe	Met	Gln	Gln	Tyr	Ser	Gln	Lys	Glu
			180					185					190		
Ala	Ser	Asn	Ser	Gln	Asn	Ser	Gln	Ala	Lys	Ile	Ile	Thr	Gly	Lys	Thr
		195					200					205			
Gly	Val	Leu	Pro	Pro	Pro	Thr	Leu	Pro	Lys	Pro	Lys	Leu	Pro	Lys	His
	210					215					220				
Πe	Lys	Asp	Asn	Lys	Asn	Asp	Phe	Ser	Pro	Lys	Val	Glu	Leu	Ala	Thr
225					230					235					240
Ser	Leu	Ser	Asp	Met	Glu	Cys	Lys	Ile	Thr	Thr	Ser	Lys	Asp	Gln	Lys
				245					250					255	
Lys	Val	Met	Val	Met	Thr	Ser	Ser	Glu	His	Thr	Glu	Thr	Lys	Gln	Asn
			260					265					270		
Val	lle	Ser	Lys	Ser	Leu	Asp	Glu	Arg	Lys	Gln	Leu	Ser	He	Asp	Ser
		275					280					285			
Ala		Cys	Leu	Ser	His	Thr	Val	Pro	Gly	Thr		Ala	Pro	Arg	Lys
	290					295					300			_	_
	Gln	lle	Ala	Pro		Ile	Lys	Ser	His		Phe	Pro	Glu	Ser	
305					310					315				_	320
Gly	Gln	Gln	Asn		Lys	Pro	Tyr	Met		Lys	Phe	Lys	Thr		Leu
			0.1	325	_			0.1	330		0.1	0.1	т.	335	
Met	He	Ala		Glu	Lys	Tyr	Arg		GIn	Lys	Glu	Glu		Glu	Lys
61	,	C1	340	C	C	т	т	345	7.1	W 1	1	Т1	350	C	C1
GIn	Lys		GIU	Ser	Ser	Tyr		Asn	116	vai	Lys		GIN	ser	GIN
Λ	C1	355	11.	Tl	C1	V - 1	360	Lua	C1.,	Mat	Dwo	365	Cln	1	The
ASII		птѕ	116	1111	Giu	Val 375	GIU	Lys	Giu	Met	380	Leu	OHI	Lys	1111
Aan	370	C111	Val	Sor	Lou	Ser	Glv	110	Aen	Sor		Cve	Thr	Val	Val
385	Giu	Olu	val	361	390	361	Oly	116	пор	395	oru	Cys	1111	· a 1	400
	Pro	Ser	Pro	Glv		Gln	Ser	Asn	Ala		He	Leu	Glv	Val	
OIII	110	001	,,,	405	001	0111	501	7,011	410	5	,,,	200	01)	415	0,0
Ser	Asp	Asn	Gln		Ser	Thr	Thr	Ser		Glu	Thr	Val	Ala		Lvs
		,,,,,,	420					425					430		J
Arg	Leu	His		Val	Leu	Ala	Ala		Glu	Asp	Lys	Asp	Lys	Met	Lys
9		435					440			•	•	445	•		•
Lys	Glu		Leu	Gln	Ser	Ser	Arg	Asp	Ile	Met	Gln	Ser	Lys	Ser	Ala
•	450					455	_	-			460				

Cys	Glu	He	Lys	G1n	Ser	His	Gln	Glu	Cys	Ser	Thr	Gln	Gln	Thr	Gln
465					470					475					480
Gln	Lys	Lys	Tyr	Leu	Glu	Gln	Leu	His	Leu	Pro	Gln	Ser	Lys	Pro	lle
				485					490					495	
Ser	Pro	Asn	Phe	Lys	Val	Lys	Thr	lle	Lys	Leu	Pro	Thr	Leu	Asp	His
			500					505					510		
Thr	Leu	Asn	Glu	Thr	Asp	His	Ser	Tyr	Glu	Ser	His	Lys	Gln	Gln	Ser
		515					520					525			
Glu	He	Asp	Val	Gln	Thr	Phe	Thr	Lys	Lys	Gln	Tyr	Leu	Lys	Thr	Lys
	530					535					540				
Lys	Thr	Glu	Ala	Ser	Thr	Glu	Cys	Ser	His	Lys	Gln	Ser	Leu	Ala	Glu
545					550					555					560
Arg	His	Tyr	Gln	Leu	Pro	Lys	Lys	Glu	Lys	Arg	Val	Thr	Val	Gln	Leu
				565					570					575	
Pro	Thr	Glu	Ser	Ile	Gln	Lys	Asn	Gln	Glu	Asp	Lys	Leu	Lys	Met	Val
			580					585					590		
Pro	Arg	Lys	Gln	Arg	Glu	Phe	Ser	Gly	Ser	Asp	Arg	Gly	Lys	Leu	Pro
		595					600					605			
Gly	Ser	Glu	Glu	Lys	Asn	Gln	Gly	Pro	Ser	Met	He	Gly	Arg	Lys	Glu
	610					615					620				
Glu	Arg	Leu	He	Thr	Glu	Arg	Lys	His	Glu	His	Leu	Lys	Asn	Lys	Ser
625					630					635					640
Ala	Pro	Lys	Val	Val	Lys	Gln	Lys	Val	He	Asp	Ala	His	Leu	Asp	Ser
				645					650					655	
Gln	Thr	Gln	Asn	Phe	Gln	Gln	Thr	Gln	lle	Gln	Thr	Ala	Glu	Ser	Lys
			660					665					670		
Ala	Glu	His	Lys	Lys	Leu	Pro	Gln	Pro	Tyr	Asn	Ser	Leu	Gln	Glu	Glu
		675					680					685			
Lys	Cys	Leu	Glu	Val	Lys	Gly	He	Gln	Glu	Lys	GIn	Val	Phe	Ser	Asn
	690					695					700				
Thr	Lys	Asp	Ser	Lys	Gln	G] u	He	Thr	G]n	Asn	Lys	Ser	Phe	Phe	Ser
705					710					715					720
Ser	Val	Lys	Glu	Ser	Gln	Arg	Asp	Asp	Gly	Lys	Gly	Ala	Leu	Asn	11e
				725					730					735	
Va]	Glu	Phe	Leu	Arg	Lys	Arg	Glu	Glu	Leu	Gln	Gln	lle	Leu	Ser	Arg
			740					745					750		

Val Lys Gln Phe Glu Ala Glu Pro Asn Lys Ser Gly Leu Lys Thr Phe Gln Thr Leu Leu Asn Thr Ile Pro Gly Trp Leu Ile Ser Glu Asp Lys Arg Glu Tyr Ala Val His Ile Ala Met Glu Asn Asn Leu Glu Lys Val Lys Glu Glu Ile Thr His Ile Lys Thr Gln Ala Glu Asp Met Leu Val Ser Tyr Glu Asn Ile Ile Gln Thr Ala Met Met Ser Ser Lys Thr Gly Lys Pro Gly Asn Lys Pro Thr Ser Leu Asp Glu Thr Ser Ser Lys Val Ser Asn Val His Val Ser Asn Asn Lys Asn Ser Glu Gln Lys

<210> 3352

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3352

Met Asn Phe Val Leu Val Lys Val Arg Tyr Asp Val Val Gly Met Phe Trp Asn Met Phe Phe Gln Val Ala Ser Gly Gly Gly Val Gly Asp Gly Val Gln Glu Pro Thr Thr Gly Asn Trp Arg Gly Met Leu Lys Thr Ser Lys Ala Glu Glu Leu Leu Ala Glu Glu Lys Ser Lys Pro Ile Pro Ile Met Pro Ala Ser Pro Gln Lys Lys Lys Lys Ile Lys Gln His Pro Asp Arg Tyr Thr Tyr Ser Phe Arg Leu Thr Asp Leu Ser Cys Ile Tyr Gly Val Val Met Arg Phe Arg Thr Tyr Thr Tyr Phe Val Lys Ile Pro

Gln Met Ile Leu Gly Met Asn Asp Tyr Ile Ile Asn Phe Lys Met Tyr 125 120 Leu Glu 11e Leu Lys Thr Ser Ser Pro Val Ser Asn Arg Gln His 11e 130 135 140 Tyr lle Ala Asp lle Thr Phe Phe Ser Val Tyr Asp Gln Val Phe Met 150 155 Lys Asp Tyr Trp Gln Gly Lys Tyr Glu Tyr Val Asn Phe Ser Leu Trp 165 170 His Gln Phe Thr Lys Glu Gln Gln Ala His Gln Leu Met Ser Asn Ile 180 185 190 Lys Thr Pro Thr Ser Val 195

<210> 3353

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3353

Met Cys Met Ile Asn Val Pro Leu Glu Gln Asp Asp Trp Asn Pro Gln
1 5 10 15

Val Pro Ser Pro Thr Gln Leu Cys Pro Leu Ser Leu Pro Trp Pro Thr
20 25 30

Gln Leu Leu Gln Gln Thr Pro Val Gly Leu His Trp Ser Arg Gln Gln
35 40 45

Glu Gly Pro Gln Ala Leu Ser Tyr Trp Glu Ser Gly Asp Gly Thr Gly
50 55 60

Thr Arg Leu Leu Arg Lys Glu Gly Ser Trp Pro Val Gln Asn Val Ala
65 70 75 80

Asp Gly Pro Ala Trp Trp Leu Met Pro Val Val Leu Ala Leu Gly Glu 85 90 95

Ala Glu Ala Asp Arg Ser Pro Glu Val Gly Ser Pro Thr Pro Ala Trp 100 105 110

Pro Ala

<211> 105 <212> PRT <213> Homo sapiens <400> 3354 Met Gly Phe Val Asn Ser Arg Lys Gly Thr Lys Phe Cys Leu Lys Arg 10 Glu Gly Phe Ser Lys Gly Val Met Phe Asp Leu Arg Pro Arg Glu Gly 25 Glu Arg Lys Glu Ala Cys Arg Gly Ala Leu Val Thr Arg Gly Met Leu 35 40 45 Tyr Cys Val Asp Ser Arg Asn Arg Gly Glu Ala Leu Ala Leu Ser Leu 55 Ser Ala Phe Trp Phe Met Gln Leu Ser Leu Pro Lys Ile Phe Phe Tyr . 70 75 Leu Cys Phe Cys Leu Gln Leu Leu Pro Leu Glu Val Ser Leu Ser Phe 85 90 95 Lys Phe Arg Glu Pro Cys Leu Trp His 100 105 <210> 3355 <211> 250 <212> PRT <213> Homo sapiens <400> 3355 Met Pro Leu Asp Lys Met Val Asp Leu Ser Gly Ser Gln Leu Arg Arg 10 Phe Pro Leu His Val Cys Ser Phe Arg Glu Leu Val Lys Leu Tyr Leu 25 30 Ser Asp Asn His Leu Asn Ser Leu Pro Pro Glu Leu Gly Gln Leu Gln

40

45

<210> 3354

Asn Leu Gln Ile Leu Ala Leu Asp Phe Asn Asn Phe Lys Ala Leu Pro Gln Val Val Cys Thr Leu Lys Gln Leu Cys Ile Leu Tyr Leu Gly Asn Asn Lys Leu Cys Asp Leu Pro Ser Glu Leu Ser Leu Leu Gln Asn Leu Arg Thr Leu Trp Ile Glu Ala Asn Cys Leu Thr Gln Leu Pro Asp Val Val Cys Glu Leu Ser Leu Leu Lys Thr Leu His Ala Gly Ser Asn Ala Leu Arg Leu Leu Pro Gly Gln Leu Arg Arg Leu Gln Glu Leu Arg Thr lle Trp Leu Ser Gly Asn Arg Leu Thr Asp Phe Pro Thr Val Leu Leu His Met Pro Phe Leu Glu Val Ile Asp Val Asp Trp Asn Ser Ile Arg Tyr Phe Pro Ser Leu Ala His Leu Ser Ser Leu Lys Leu Val Ile Tyr Asp His Asn Pro Cys Arg Asn Ala Pro Lys Val Ala Lys Gly Val Arg Arg Val Gly Arg Trp Ala Glu Glu Thr Pro Glu Pro Asp Pro Arg Lys Ala Arg Arg Tyr Ala Leu Val Arg Glu Glu Ser Gln Glu Leu Gln Ala Pro Val Pro Leu Leu Pro Pro Thr Asn Ser

<210> 3356

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3356

Met Thr Ser Val Ala His Met Ser Thr Phe Arg Pro His Ile Cys His

1 5 10 15

Leu Ser Lys Thr Ser Pro His Pro Leu Val Thr Arg Lys Arg Ala Ser 25 Ser Pro His Val Val lle Val Leu Thr Ser Gly Leu Lys Gly Lys Ala 45 40 Ser Leu Arg Leu Arg Pro His Leu Pro Val 11e Phe His Pro 11e Pro 55 60 Leu Pro Arg Leu Leu Gly Leu Ser Ser Cys Ser 11e Pro Pro Phe Ala 70 75 Val Ser Val Pro Pro Phe Pro Pro Gly Ser Ser Ser Ala Met Cys 95 85 Ser Leu Pro Phe Leu Leu Lys Arg Lys Thr 100 105

<210> 3357

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3357

Met Asn Asn Glu Thr Thr Thr Leu Ile Ser Leu Lys Glu Ala Met Lys

1 5 10 15

Arg Val Asp His Lys Leu Gln Ala Leu Glu Thr Gln Phe Lys Glu Leu 20 25 30

Asp Phe Thr Lys Asp Asn Leu Met Gln Lys Phe Glu His His Ser Lys 35 40 45

Ala Leu Ala Ser Gln Ala Ala Gln Asp Glu Met Trp Thr Ala Val Arg
50 55 60

Ala Leu Gln Leu Thr Ser Met Glu Leu Asn Ile Leu Tyr Ser Tyr Val 65 70 75 80

lle Glu Val Leu Ile Cys Leu His Thr Arg Val Leu Glu Lys Leu Pro 85 90 95

Asp Leu Val Arg Gly Leu Pro Thr Leu Ala Ser Val Leu Arg Arg Lys 100 105 110

Val Lys Asn Lys Arg Val Arg Val Val Trp Glu Ser Ile Leu Glu Glu 115 120 125 Cys Gly Leu Gln Glu Gly Asp 11e Thr Ala Leu Cys Thr Phe Phe 11e Ala Arg Gly Asn Lys Ala Glu His Tyr Thr Ala Lys Val Arg Gln Met Tyr Ile Arg Asp Val Thr Phe Leu lle Thr Asn Met Val Lys Asn Gln Ala Leu Gln Asp Ser Leu Leu Arg Ala Val Gln Val Ile Glu Lys Gly Lys Ala Val Arg Thr Pro Glu Lys Gln Lys Ser Ser Leu Glu Glu Leu Ile Pro Ser Val Lys Asn

<210> 3358

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3358

Met Gln Met Gly Asp Glu Phe Leu His Thr Leu Val Phe Leu Pro Phe Val Asn Leu Thr Thr Asn Val Leu Ser Tyr Arg Lys Met Cys Val Arg Val Cys Met Ser Glu Cys Val Arg Val Cys Val Cys Ala Cys Cys Lys Asn Met Leu Glu Cys Glu Cys Gly Val Cys Leu His Val Cys Met Cys Glu Cys Met His Ala Arg Val Cys Lys Ser Val His Val His Val Cys Glu Thr Thr Gly Met Arg Tyr Val Arg Met Ser Val Cys Thr Cys Val Ser Met Cys Ile Val Tyr Asn Val His Glu Tyr Ser Val Arg Ala

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<210> 3359
<211> 111
<212> PRT
<213> Homo sapiens
<400> 3359
Met Gly Lys Arg Asp Asn Arg Val Ala Tyr Met Asn Pro lle Ala Met
                                    10
Ala Arg Ser Arg Gly Pro Ile Gln Ser Ser Gly Pro Thr Ile Gln Asp
            20
                                25
                                                     30
Tyr Leu Asn Arg Pro Arg Pro Thr Trp Glu Glu Val Lys Glu Gln Leu
                             40
                                                 45
Glu Lys Lys Lys Gly Ser Lys Ala Leu Ala Glu Phe Glu Glu Lys
     50
                         55
Met Asn Glu Asn Trp Lys Lys Glu Leu Glu Lys His Arg Glu Lys Leu
                     70
                                         75
Leu Ser Gly Ser Glu Ser Ser Ser Lys Lys Arg Gln Arg Lys Lys
                 85
                                     90
Glu Lys Lys Ser Gly Arg Val Ser Lys Asn Phe Pro Phe Phe
            100
                                105
                                                    110
<210> 3360
<211> 290
<212> PRT
<213> Homo sapiens
<400> 3360
Met Glu Ala Leu Ala Ser Thr Glu Lys Met Leu Gln Asp Lys Val Asn
 1
                 5
                                     10
                                                         15
Lys Thr Ser Lys Glu Arg Gln Gln Gln Val Glu Ala Val Glu Leu Glu
                                25
Ala Lys Glu Val Leu Lys Lys Leu Phe Pro Lys Val Ser Val Pro Ser
                             40
                                                 45
Asn Leu Ser Tyr Gly Glu Trp Leu His Gly Phe Glu Lys Lys Ala Lys
```

55

60

```
Glu Cys Met Ala Gly Thr Ser Gly Ser Glu Glu Val Lys Val Leu Glu
                     70
                                         75
His Lys Leu Lys Glu Ala Asp Glu Met His Thr Leu Leu Gln Leu Glu
                                     90
                 85
Cys Glu Lys Tyr Lys Ser Val Leu Ala Glu Thr Glu Gly 11e Leu Gln
            100
                                105
Lys Leu Gln Arg Ser Val Glu Glu Glu Glu Asn Lys Trp Lys Val Lys
                            120
        115
Val Asp Glu Ser His Lys Thr Ile Lys Gln Met Gln Ser Ser Phe Thr
                        135
                                             140
    130
Ser Ser Glu Gln Glu Leu Glu Arg Leu Arg Ser Glu Asn Lys Asp Ile
                    150
                                         155
Glu Asn Leu Arg Arg Glu Arg Glu His Leu Glu Met Glu Leu Gly Lys
                                     170
                                                         175
                165
Ala Glu Met Glu Arg Ser Thr Tyr Val Thr Glu Val Arg Glu Leu Lys
                                                     190
            180
                                185
Ala Gln Leu Asn Glu Thr Leu Thr Lys Leu Arg Thr Glu Gln Asn Glu
                            200
Arg Gln Lys Val Ala Gly Asp Leu His Lys Ala Gln Gln Ser Leu Glu
                                             220
    210
                        215
Leu Ile Gln Ser Lys Ile Val Lys Ala Ala Gly Asp Thr Thr Val lle
                                         235
                    230
Glu Asn Ser Asp Val Ser Pro Glu Thr Glu Ser Ser Glu Lys Glu Thr
                                     250
                                                         255
                245
Met Ser Val Ser Leu Asn Gln Thr Val Thr Gln Leu Gln Gln Leu Leu
            260
                                 265
Gln Ala Val Asn Gln Gln Leu Thr Lys Glu Lys Glu His Tyr Gln Val
                             280
                                                 285
Leu Glu
    290
```

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3361 Met Ala Ala Ala Arg Thr Pro Pro Gly Gln Gln Pro Arg Leu Thr Ser Pro Pro Pro Pro Ser lle Ser Pro Ala Ala Trp Arg Trp Glu Ala Ala 25 Pro Arg Gly His Gly Pro Ser Pro Lys Ala His Thr Pro Ala Phe Arg 40 45 Arg His Pro Pro Leu Thr Thr Ala Arg Glu Val Ala Arg Val Arg Thr 50 55 60 Leu His Pro Gln Asp Val Ala Leu Ala Gly Pro Pro Gly Ser Gly Cys 70 75 Leu Arg Trp Val Trp Asp Leu Ser Cys Gly Val Phe Asp Gly Gly Trp 85 90 Leu Gly Arg Glu Ala Ser Ser Val Gly Arg Gly Pro Arg Gly Pro Gly 105 Ala Ala Val Val Lys Met Arg Arg His Gly Gly Arg Gly Lys Ala Pro 120 Leu Pro Ser Ser Thr Pro Ala Pro Gly Asp Cys Phe Leu Tyr 130 135 140 <210> 3362 <211> 153 <212> PRT <213> Homo sapiens ⟨400⟩ 3362 Met Leu Arg Gln Cys Tyr Lys Glu Asp Gly Ser Ser Lys Ser Pro Asp

⟨210⟩ 3363

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3363

Met Ser Met Lys Leu Ser Val Thr Cys Glu Ser Ala Val Pro Met Ser 1 5 10 15

11e Tyr Val Leu Asn Leu Leu Leu Phe Gln Lys Arg Gly Leu Ala His 20 25 30

Gln Leu Glu Glu Tyr Leu Leu Lys Trp Arg Arg Asn Lys Ala Thr Lys
35 40 45

Val Ala Lys Ile Ser Ser Glu Gln Lys Lys Ile Leu Arg Arg Lys Met 50 55 60

Val Leu Gln Leu Val Leu Gln Gly Leu Ala Thr Cys Val Ser His Ser 65 . 70 . 75 . 80

Arg Ala Ala Asn His Gly Val Gly Pro Ser His Phe Ala Gln Gly Gly
85 90 95

Leu Arg Ser Ser Gly Lys Val Leu Leu Gln Val Thr Asp Tyr Arg Cys 100 105 110

Val Val Glu Gly Gln Ala

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3364

Met Trp Ser Leu Pro His Pro Thr Trp Thr Leu Asp Ser Thr Cys Tyr

1 5 10 15

Ala Ala Ala Pro Ala Trp Ala Ser Phe Ser Pro Arg Thr Asp Ser Asp 20 25 30

Ile Pro His Cys Ser Thr Thr Leu His Gly His Pro Pro His Pro Ala
35 40 45

Trp Ala Leu Thr Pro Tyr Ser Arg Pro Pro Pro Ala Met Ser Gly His
50 55 60

Pro Pro His Pro Ser Trp Ala Cys Lys Leu His Ile Thr Cys Pro His 65 70 75 80

Ala Trp Ile Pro Phe Ser Pro His Met Ala Ser Asp Thr Pro Pro Trp 85 90 95

Thr Ala Ile Leu Gln Gly Ser Thr Ser Ser Pro Ala Gln Ala Cys Trp 100 105 110

Pro Pro Ala Trp Met Leu Phe Phe Thr Gly Pro Ala Leu Thr Pro Pro 115 120 125

Gly Ala Ser Cys Ala Gly Val Phe Leu Thr Leu Leu Gly Leu 130 135 140

<210> 3365

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3365

Met Asp Pro Val Ala Ser Ser Ser Ile Arg Pro Glu Pro Asp Ser His

Tyr Leu Gln Phe Gln Thr Gln Pro His Val Leu Trp Asn Arg Leu Pro Glu Ala Trp Asp Arg Ser Glu Ser Leu Asp Ser Ser Trp Gly Gly Trp Val Gly Val Arg Gly Arg Val Pro Glu Gly Pro His Ser Thr Leu Ser Trp Ser Ala Gly Gln Gln Glu Glu Gln Ala Trp Gly Trp Leu Trp Ser Leu Pro Pro Arg Ser Glu Ala Val Arg Gln Glu Lys Gly Glu Lys Glu Pro Ser Phe Leu Glu Ser Asp Ser Asp Pro Ser Arg His Ser Gln Leu Val Ser Gly Asp Leu Ser Leu Thr His

<210> 3366

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3366

Met Pro Gln Thr Lys Asp Glu Gly Gly Gly Arg Trp Gly Val Gly Gly Leu Ser Asn Lys Val Trp Cys Cys Arg Thr Phe Ser Phe Phe Phe Val Val Val Phe Val Phe Ile Phe Phe Leu Leu Ser Ser Phe Phe Leu Leu Pro Ser Ser Ser Phe Phe Leu Leu Leu Val Ser Leu Cys Tyr Pro Ala Trp Ser Ala Leu Arg Gln Ser Gln Leu Thr Ala Thr Ser

85 90 95

Thr Cys Gln Val

<210> 3367

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3367

Met Arg Val Leu Ser Arg Gly Gly Phe Gln Arg Val Lys Gly Arg His

1 5 10 15

Leu Pro Gln Leu Met Pro Gln Ser Ala Ala Pro Gln Val Ala Glu Glu 20 25 30

Gly Leu Phe Pro Gly Met Ile Leu Gln Thr Asn lle Lys Ala lle Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Pro Leu Gly Leu Cys Leu Gly Arg Leu Lys Leu Arg Lys Leu Pro Lys
50 55 60

Val Ala Val Leu Met Ser Ala Ala Leu Lys Pro Lys Asp Met Gln Phe
65 70 75 80

Phe Phe Phe Phe Glu Met Glu Ser Cys Pro Val Ala Arg Leu Glu 85 90 95

Cys Ser Gly Val Ile Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser 100 105 110

Ser Asp Ser Ser Ala Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Thr 115 120 125

Cys His Tyr Thr Gln Ile Val Phe Val Phe Leu Val Glu Met Gly Phe 130 135 140

His His Val Gly Gln Asp Gly Leu Asp Leu Leu Thr Leu 145 150 155

<210> 3368

<211> 342

<212> PRT

<213> Homo sapiens

<400)> 33	368													
Met	Asn	Pro	Ser	Glu	Met	Gln	Gly	Lys	Ala	Pro	Pro	Gln	Arg	Gln	Arg
1				5					10					15	
Thr	Arg	Asn	Arg	Thr	Ser	Leu	Thr	Arg	Arg	Val	Asn	Lys	Met	Val	He
			20					25					30		
Ser	G1u	Glu	G1n	Met	Lys	Leu	Pro	Ser	Thr	Lys	Lys	Ala	G1 y	Pro	Pro
		35					40					45			
Thr	Trp	Ala	Gln	Leu	Lys	Lys	Leu	Thr	Gln	Leu	Ala	Glu	Lys	Ser	Leu
	50					55					60				
Glu	Asn	Thr	Arg	Val	Thr	Gln	Thr	Pro	Glu	Asn	Lys	Leu	Leu	Ala	Ala
65					70					75					80
Leu	Met	He	Val		Thr	Val	Val	Ser		Pro	Met	Ser	Ala		Ala
			_	85	-	_	_		90					95	
Ala	Thr	Ala		Tyr	Thr	Tyr	Trp		Tyr	Val	Pro	Phe	Pro	Pro	Leu
		4.3	100	TI	T	7.1		105	D		61	V 1	110	V 3	
He	Arg		Val	Ihr	Trp	He		Asn	Pro	He	Glu		Tyr	Val	Asn
Aan	Can	115	Two	Val	Drag	Clu	120 Pro	The	Aan	Aon	Ana	125	Dno	110	Cln
ASII	130	ита	пр	vai	Pro	135	PTO	Inr	ASP	ASP	140	Gry	Pro	на	GIII
Pro		Glu	Glu	G1v	Mot		Ha	Acn	Πla	Sor		Glv	Tyr	Hie	Tyr
145	Old	Olu	Olu	Gry	150	MCt	110	пэн	110	155	116	Oly	1 9 1	1113	160
	Ser	He	Cvs	Leu		Lvs	Thr	Pro	G1 v		Leu	Met	Pro	Thr	
			0,0	165	017	.5,0			170	•,•				175	
Gln	Asn	Trp	Leu		Glu	Glu	Pro	Thr		Ser	Ala	Thr	Ser		Phe
		-	180					185					190	•	
Thr	Tyr	His	Met	Ile	Ser	Gly	Met	Ser	Leu	Gly	Ser	Gln	Met	Asn	Asn
		195					200					205			
Leu	Gln	Asn	Ser	Ser	Tyr	Gln	Arg	Ser	Leu	Lys	Phe	Arg	Pro	Lys	Trp
	210					215					220				
Lys	Pro	Cys	Gln	Lys	Glu	lle	Pro	Glu	Glu	Ser	Lys	Asp	Pro	Glu	Val
225					230					235					240
Leu	Val	Trp	Glu	Glu	Cys	Val	Ala	Asp	Thr	Ala	Val	Val	Leu	Gln	Asn
				245					250					255	
Asn	Lys	Phe	Arg	He	lle	He	Asp	Trp	Ala	Pro	Arg	Gly	Gln	Leu	Tyr
			260					265					270		

Tyr Asp Cys Met Gly Gln Thr His Ser Cys Ser Gln Ala Pro Ser Val Trp Pro Thr Asn Leu Ala Tyr Asp Gly Asp Leu Thr Lys Arg Leu Asp Gln Val Tyr Arg Arg Leu Glu Ser Pro Tyr Ser Trp Lys Trp Gly Glu Lys Gly Ile Pro Ser Pro Arg Pro Lys Leu Val Ser Pro Val Val Gly Pro Glu His Pro Glu Leu

<210> 3369

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3369

Met Pro Arg Arg Leu Gln Pro Arg Gly Ala Gly Thr Lys Gly Pro Pro Ala Pro Ala Pro Ala Ala Ser Gly Ala Ala Arg Asn Ser His Ser Ala Ala Ser Arg Asp Pro Pro Ala Ser Ala Lys Pro Leu Leu Arg Trp Asp Glu Val Pro Asp Asp Phe Val Glu Cys Phe Ile Leu Ser Gly Tyr Arg Arg Leu Pro Cys Thr Ala Gln Glu Cys Leu Ala Ser Val Leu Lys Pro Thr Asn Glu Thr Leu Asn Phe Trp Thr His Phe Ile Pro Leu Leu Leu Phe Leu Ser Lys Phe Cys Arg Leu Phe Phe Leu Ser Gly Gly Asp Val Pro Phe His His Pro Trp Leu Leu Pro Leu Trp Cys Tyr Ala Ser Gly

Val Leu Leu Thr Phe Ala Met Ser Cys Thr Ala His Val Phe Ser Cys

Leu	Ser	Leu	Arg	Leu	Arg	Ala	Ala	Phe	Phe	Tyr	Leu	Asp	Tyr	Ala	Ser
145					150					155					160
He	Ser	Tyr	Tyr	Gly	Phe	G1 y	Ser	Thr	Val	Ala	Tyr	Tyr	Tyr	Tyr	Leu
				165					170					175	
Leu	Pro	Gly	Leu	Ser	Leu	Leu	Asp	Ala	Arg	Val	Met	Thr	Pro	Tyr	Leu
			180					185					190		
Gln	Gln	Arg	Leu	Gly	Trp	His	Val	Asp	Cys	Thr	Arg	Leu	Ile	Ala	Ala
		195					200					205			
Tyr	Arg	Ala	Leu	Val	Leu	Pro	Val	Ala	Phe	Val	Leu	Ala	Val	Ala	Cys
	210					215					220				
Thr	Val	Ala	Cys	Cys	Lys	Ser	Arg	Thr	Asp	Trp	Cys	Thr	Tyr	Pro	Phe
225					230					235					240
Ala	Leu	Arg	Thr	Phe	Val	Phe	Val	Met	Pro	Leu	Ser	Met	Ala	Cys	Pro
				245					250					255	
lle	Met	Leu	Glu	Ser	Trp	Leu	Phe	Asp	Leu	Arg	Gly	$Gl \mathbf{u}$	Asn	Pro	Thr
			260					265					270		
Leu	Phe	Val	His	Phe	Tyr	Arg	Arg	Tyr	Phe	Trp	Leu	Val	Val	Ala	Ala
		275					280					285			
Phe	Phe		Val	Ser	Lys	Ile		Glu	Arg	lle	Gln		Gly	Leu	Phe
Phe	Phe 290		Val	Ser	Lys	I1e 295		Glu	Arg	lle	G1n 300		Gly	Leu	Phe
	290	Asn				295	Pro				300	Pro	Gly Thr		
	290	Asn				295	Pro				300	Pro			
Asp 305	290 11e	Asn lle	Gly	His	Ser 310	295 His	Pro Gln	Leu	Phe	His 315	300 11e	Pro Phe		Phe	Leu 320
Asp 305	290 11e	Asn lle	Gly	His	Ser 310	295 His	Pro Gln	Leu	Phe	His 315	300 11e	Pro Phe	Thr	Phe	Leu 320
Asp 305 Ser	290 11e 11e	Asn lle Tyr	Gly Asp	His Gln 325	Ser 310 Val	295 His Tyr	Pro Gln Tyr	Leu Val	Phe Glu 330	His 315 Glu	300 11e Gly	Pro Phe Leu	Thr	Phe Gln 335	Leu 320 Phe
Asp 305 Ser	290 11e 11e	Asn lle Tyr	Gly Asp	His Gln 325	Ser 310 Val	295 His Tyr	Pro Gln Tyr	Leu Val	Phe Glu 330	His 315 Glu	300 11e Gly	Pro Phe Leu	Thr Arg	Phe Gln 335	Leu 320 Phe
Asp 305 Ser Leu	290 Ile Ile Gln	Asn lle Tyr Ala	Gly Asp Pro 340	His Gln 325 Pro	Ser 310 Val	295 His Tyr Ala	Pro Gln Tyr Pro	Leu Val Thr 345	Phe Glu 330 Phe	His 315 Glu Ser	300 11e Gly Gly	Pro Phe Leu Thr	Thr Arg Val	Phe Gln 335 Gly	Leu 320 Phe Tyr
Asp 305 Ser Leu	290 Ile Ile Gln	Asn lle Tyr Ala	Gly Asp Pro 340	His Gln 325 Pro	Ser 310 Val	295 His Tyr Ala	Pro Gln Tyr Pro	Leu Val Thr 345	Phe Glu 330 Phe	His 315 Glu Ser	300 11e Gly Gly	Pro Phe Leu Thr	Thr Arg Val 350	Phe Gln 335 Gly	Leu 320 Phe Tyr
Asp 305 Ser Leu Met	290 Ile Ile Gln Leu	Asn lle Tyr Ala Leu 355	Gly Asp Pro 340 Leu	His Gln 325 Pro Val	Ser 310 Val	295 His Tyr Ala Cys	Pro Gln Tyr Pro Leu 360	Leu Val Thr 345 Gly	Phe Glu 330 Phe	His 315 Glu Ser	300 11e Gly Gly	Pro Phe Leu Thr	Thr Arg Val 350	Phe Gln 335 Gly	Leu 320 Phe Tyr

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3370 Met Pro Ala Ser Ser Leu Leu Ser IIe Leu Pro Pro Arg Tyr IIe Ser Asn Leu Pro Thr Phe Leu Glu Leu His Ile Thr Asp Leu Val Gln Ala 20 25 lle Ile Ile Ser Leu Leu Gly Pro Thr Lys Thr Leu Ile Thr Val Leu 40 45 Phe Val Ser Phe Cys Leu Phe Leu Arg Gln Ser Leu Ile Leu Ile Thr 50 55 60 Gln Ala Gly Val Gln Trp His Asp Leu Ser Ser Leu Gln Pro Leu Pro 70 75 Pro Met Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Arg Ser Trp Asp 95 90 85 Tyr Trp His Ala Pro Pro His Gln Ala Asn Phe Ile Phe Leu Val Glu 105 Met Gly Phe His Pro Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser 120 Gly Asp Pro Pro Ala Ser Ala Ser Arg Ser Ala Gly 11e Thr Gly Met 130 135 140 Asn His His Gly Arg Leu Thr Phe 11e Leu Ser Leu Val Leu Leu Glu 150 155 Tyr Ser Gln Ile Ile Phe His Cys Val Tyr Ile Pro His Phe Ala His 165 170 Trp Phe Leu Met Val Arg Ser Glu Leu Trp Val Asp Leu Ala lle Gly 180 185 190

<210> 3371

Arg

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3371

Met Phe Arg Lys Thr Thr Ser Phe Phe Phe Phe Phe Trp Arg Gln Gly 10 Leu Ala Leu Ser Pro Arg Leu Gly Cys Ser Gly Val 11e Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gly Val Ala Gly Ile Thr Gly Ile Cys Asp His Ala Arg Leu Ile Phe 55 60 Val Phe Ser Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly Leu. 65 70 75 80 Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Trp Ala Ser Gln Ser Ala 90 85 Gln 11e Thr Gly Val Ser His Arg Ala Gln Ser Glu Asn Tyr Leu Tyr 105 100 110 Tyr Cys Ser Cys Ile Leu Lys Asn Ser Leu Arg Pro 115 120

<210> 3372

<211> 515

<212> PRT

<213> Homo sapiens

<400> 3372

Met Leu Met His Trp Gly Trp Phe Leu Glu His Asp Leu Asp His Thr

1 5 10 15

Val Pro Ala Leu Ser Thr Ala Arg Phe Ser Asp Gly Arg Pro Cys Asn
20 25 30

Ser Val Cys Thr Asn Asp Pro Pro Cys Phe Pro Met Asn Thr Arg His
35 40 45

Ala Asp Pro Arg Gly Thr His Ala Pro Cys Met Leu Phe Ala Arg Ser 50 55 60

Ser Pro Ala Cys Ala Ser Gly Arg Pro Ser Ala Thr Val Asp Ser Val 65 70 75 80

Tyr Ala Arg Glu Gln 11e Asn Gln Gln Thr Ala Tyr 11e Asp Gly Ser 85 90 95

Asn	Val	Tyr	Gly	Ser	Ser	Glu	Arg	Glu	Ser	Gln	Ala	Leu	Arg	Asp	Pro
			100					105					110		
Ser	Val	Pro	Arg	Gly	Leu	Leu	Lys	Thr	Gly	Phe	Pro	Trp	Pro	Pro	Ser
		115					120					125			
Gly	Lys	Pro	Leu	Leu	Pro	Phe	Ser	Thr	Gly	Pro	Pro	Thr	Glu	Cys	Ala
	130					135					140				
Arg	Gln	Glu	Gln	Glu	Ser	Pro	Cys	Phe	Leu	Ala	Gly	Asp	His	Arg	Ala
145					150					155					160
Asn	Glu	His	Leu	Ala	Leu	Ala	Ala	Met	His	Thr	Leu	Trp	Phe	Arg	Glu
				165				,	170					175	
His	Asn	Arg	Val	Ala	Thr	Glu	Leu	Ser	Ala	Leu	Asn	Pro	His	Trp	Glu
			180					185					190		
Gly	Asn	Thr	Val	Tyr	Gln	Glu	Ala	Arg	Lys	He	Val	Gly	Ala	Glu	Leu
		195					200					205			
Gln	His	11e	Thr	Tyr	Ser	His	Trp	Leu	Pro	Lys	Val	Leu	Gly	Asp	Pro
	210					215					220				
Gly	Thr	Arg	Met	Leu	Arg	Gly	Tyr	Arg	Gly	Tyr	Asn	Pro	Asn	Val	Asn
225					230					235					240
Ala	Gly	Ile	lle	Asn	Ser	Phe	Ala	Thr	Ala	Ala	Phe	Arg	Phe	Gly	His
				245					250					255	
Thr	Leu	11e	Asn	Pro	He	Leu	Tyr	Arg	Leu	Asn	Ala	Thr	Leu	Gly	Glu
			260					265					270		
lle	Ser	Glu	Gly	His	Leu	Pro	Phe	His	Lys	Ala	Leu	Phe	Ser	Pro	Ser
		275					280					285			
Arg	11e	He	Lys	Glu	Gly	Gly	Пе	Asp	Pro	Val	Leu	Arg	G1 y	Leu	Phe
	290					295					300				
Gly	Val	Ala	Ala	Lys	Trp	Arg	Ala	Pro	Ser	Tyr	Leu	Leu	Ser	Pro	Glu
305					310					315					320
Leu	Thr	Gln	Arg	Leu	Phe	Ser	Ala	Ala	Tyr	Ser	Ala	Ala	Val	Asp	Ser
				325					330					335	
Ala	Ala	Thr	lle	lle	Gln	Arg	Gly	Arg	Asp	His	Gly	Ile	Pro	Pro	Tyr
			340					345					350		
Val	Asp	Phe	Arg	Val	Phe	Cys	Asn	Leu	Thr	Ser	Val	Lys	Asn	Phe	Glu
		355					360					365			
Asp	Leu	Gln	Asn	Glu	He	Lys	Asp	Ser	Glu	11e	Arg	Gln	Lys	Leu	Arg
	370					375					380				

Lys Leu Tyr Gly Ser Pro Gly Asp Ile Asp Leu Trp Pro Ala Leu Met 385 390 395 400

Val Glu Asp Leu Ile Pro Gly Thr Arg Val Gly Pro Thr Leu Met Cys 405 410 415

Leu Asn Cys Ser Glu Ile Pro Lys Val Asp Leu Arg Val Trp Gln Asp 485 490 495

Cys Cys Ala Asp Lys Gln Ala Gly Gly Thr Pro Glu Ala Gly Arg Val 500 505 510

Tyr Arg Cys 515

<210> 3373

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3373

Pro Leu Thr Trp Leu Arg Asn Arg Val Arg Ala Gly Val Leu Ser Arg

Gly Trp Ala Arg Glu Pro Gly Ser Gly Arg Gln Ser Trp Cys Pro Gly Gly Gly Gly Pro Gly Arg Leu His Trp Glu Pro Ala Pro Gly Trp Gly Val Pro Gln Ala Tyr Arg Glu Gln Thr Leu Leu Leu Arg Arg Gly Gly Leu Gln Pro Ala Val Leu Ser Leu Arg Val Leu His Leu Leu Asp Ala Gly Thr Gln Gln Leu Ile Leu Glu Gln Gly Arg Val Gly Gln Ala Val Cys Gly His Gln Ala Gln <210> 3374 <211> 868 <212> PRT <213> Homo sapiens <400> 3374 Met Trp Pro Arg Leu Ala Phe Cys Cys Trp Gly Leu Ala Leu Val Ser Gly Trp Ala Thr Phe Gln Gln Met Ser Pro Ser Arg Asn Phe Ser Phe Arg Leu Phe Pro Glu Thr Ala Pro Gly Ala Pro Gly Ser 11e Pro Ala Pro Pro Ala Pro Gly Asp Glu Ala Ala Gly Ser Arg Val Glu Arg Leu Gly Gln Ala Phe Arg Arg Arg Val Arg Leu Leu Arg Glu Leu Ser Glu Arg Leu Glu Leu Val Phe Leu Val Asp Asp Ser Ser Ser Val Gly Glu

Val Asn Phe Arg Ser Glu Leu Met Phe Val Arg Lys Leu Leu Ser Asp

			100					105					110		
Phe	Pro	Val	Val	Pro	Thr	Ala	Thr	Arg	Val	Ala	Пe	Val	Thr	Phe	Ser
		115					120					125			
Ser	Lys	Asn	Tyr	Val	Val	Pro	Arg	Val	Asp	Tyr	Пe	Ser	Thr	Arg	Arg
	130					135					140				
Ala	Arg	Gln	His	Lys	Cys	Ala	Leu	Leu	Leu	Gln	Glu	He	Pro	Ala	He
145					150					155					160
Ser	Tyr	Arg	Gly	Gly	Gly	Thr	Tyr	Thr	Lys	Gly	Ala	Phe	Gln	Gln	Ala
				165					170					175	
Ala	Gln	He	Leu	Leu	His	Ala	Arg	Glu	Asn	Ser	Thr	Lys	Val	Val	Phe
			180					185					190		
Leu	11e	Thr	Asp	Gly	Tyr	Ser	Asn	Gly	Gly	Asp	Pro	Arg	Pro	He	Ala
		195					200					205			
Ala	Ser	Leu	Arg	Asp	Ser	Gly	Val	Glu	Пе	Phe	Thr	Phe	Gly	He	Trp
	210					215					220				
Gln	Gly	Asn	Пе	Arg	Glu	Leu	Asn	Asp	Met	Ala	Ser	Thr	Pro	Lys	Glu
225					230					235					240
Glu	His	Cys	Tyr	Leu	Leu	His	Ser	Phe	Glu	Glu	Phe	Glu	Ala	Leu	Ala
				245					250					255	
Arg	Arg	Ala	Leu	His	Glu	Asp	Leu	Pro	Ser	Gly	Ser	Phe	He	Gln	Asp
			260					265					270		
Asp	Met	Val	His	Cys	Ser	Tyr	Leu	Cys	Asp	G]u	Gly	Lys	Asp	Cys	Cys
		275					280					285			
Asp	Arg	Met	Gly	Ser	Cys	Lys	Cys	Gly	Thr	His	Thr	Gly	His	Phe	G] u
	290					295					300				
Cys	He	Cys	Glu	Lys	Gly	Tyr	Tyr	Gly	Lys	Gly	Leu	Gln	Tyr	Glu	Cys
305					310					315					320
Thr	Ala	Cys	Pro	Ser	Gly	Thr	Tyr	Lys	Pro	Glu	Gly	Ser	Pro	Gly	Gly
				325					330					335	
He	Ser	Ser	Cys	He	Pro	Cys	Pro	Asp	Glu	Asn	His	Thr	Ser	Pro	Pro
			340					345					350		
Gly	Ser	Thr	Ser	Pro	Glu	Asp	Cys	Val	Cys	Arg	Glu	Gly	Tyr	Arg	Ala
		355					360					365			
Ser	Gly	Gln	Thr	Cys	G] u	Leu	Val	His	Cys	Pro	Ala	Leu	Lys	Pro	Pro
	370					375					380				
Glu	Asn	Gly	Tyr	Phe	He	Gln	Asn	Thr	Cys	Asn	Asn	His	Phe	Asn	Ala

385					390					395					400
Ala	Cys	Gly	Val	Arg	Cys	His	Pro	Gly	Phe	Asp	Leu	Val	Gly	Ser	Ser
				405					410					415	
He	He	Leu	Cys	Leu	Pro	Asn	Gly	Leu	Trp	Ser	Gly	Ser	Glu	Ser	Tyr
			420					425					430		
Cys	Arg	Val	Arg	Thr	Cys	Pro	His	Leu	Arg	Gln	Pro	Lys	His	Gly	His
		435					440					445			
He	Ser	Cys	Ser	Thr	Arg	Glu	Met	Leu	Tyr	Lys	Thr	Thr	Cys	Leu	Val
	450					455					460				
Ala	Cys	Asp	Glu	Gly	Tyr	Arg	Leu	Glu	Gly	Ser	Asp	Lys	Leu	Thr	Cys
465					470					475					480
Gln	Gly	Asn	Ser	Gln	Trp	Asp	Gly	Pro	Glu	Pro	Arg	Cys	Val	Glu	Arg
				485					490					495	
His	Cys	Ser	Thr	Phe	Gln	Met	Pro	Lys	Asp	Val	Пe	11e	Ser	Pro	His
			500					505					510		
Asn	Cys	Gly	Lys	Gln	Pro	Ala	Lys	Phe	Gly	Thr	He	Cys	Tyr	Val	Ser
		515					520					525			
Cys	Arg	Gln	Gly	Phe	He	Leu	Ser	Gly	Val	Lys	Glu	Met	Leu	Arg	Cys
	530					535					540				
Thr	Thr	Ser	Gly	Lys	Trp	Asn	Val	Gly	Val	Gln	Ala	Ala	Val	Cys	Lys
545					550					555					560
Asp	Val	G]u	Ala	Pro	Gln	He	Asn	Cys	Pro	Lys	Asp	He	Glu	Ala	Lys
				565					570					575	
Ala	Leu	Glu		Gln	Asp	Ser	Ala		Va]	Thr	Trp	Gln		Pro	Thr
			580					585					590		
Ala	Lys	-	Asn	Ser	Gly	Glu	-	Val	Ser	Val	His		His	Pro	Ala
		595					600					605			
Phe		Pro	Pro	Tyr	Leu	Phe	Pro	He	Gly	Asp		Ala	lle	Val	Tyr
	610					615		6.3			620				
	Ala	Thr	Asp	Leu		Gly	Asn	GIn	Ala		Cys	He	Phe	His	
625		* *			630					635					640
Lys	Val	He	Asp		Glu	Pro	Pro	Val		Asp	Trp	Cys	Arg		Pro
ь	D	u -	6.1	645	C	C 1	,	17 3	650	A 7		C	т	655	C.1
rro	Pro	val		val	5er	Glu	Lys		HIS	Ala	Ala	261		Asp	Glu
D	C 1	Dh	660 Sor	۸ ۵۰۰	Λ	Ser	C1	665	C1	1	V = 1	. דיך	670	Λ	C
110	OID	EHG	OC. 1	ASD	ΔSD	.)(-1°	ULLY	A LA	till	1.(-)11	va I	116	1111	ALP	-aer

His Thr Gln Gly Asp Leu Phe Pro Gln Gly Glu Thr lle Val Gln Tyr Thr Ala Thr Asp Pro Ser Gly Asn Asn Arg Thr Cys Asp lle His lle Val lle Lys Gly Ser Pro Cys Glu lle Pro Phe Thr Pro Val Asn Gly Asp Phe Ile Cys Thr Pro Asp Asn Thr Gly Val Asn Cys Thr Leu Thr Cys Leu Glu Gly Tyr Asp Phe Thr Glu Gly Ser Thr Asp Lys Tyr Tyr Cys Ala Tyr Glu Asp Gly Val Trp Lys Pro Thr Tyr Thr Thr Glu Trp Pro Asp Cys Ala Lys Lys Arg Phe Ala Asn His Gly Phe Lys Ser Phe Glu Met Phe Tyr Lys Ala Ala Arg Cys Asp Asp Thr Asp Leu Met Lys Lys Phe Ser Glu Ala Phe Glu Thr Thr Leu Gly Lys Met Val Pro Ser Phe Cys Ser Asp Ala Glu Asp Ile Asp Cys Arg Leu Glu Glu Asn Leu Thr Lys Lys Tyr Cys Leu Glu Tyr Asn Tyr Asp Tyr Glu Asn Gly Phe Ala Ile Gly Asn

<210> 3375

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3375

Met Ser Val Pro His Ala His Thr Gln Ser Cys Asn Asp Asn Gly Lys

1 5 10 15

Lys Cys Leu Leu Thr Leu Pro Asn Val Pro Ser Gly Gly Lys Leu Pro

20 25 30 Leu Val Glu Asn His Cys Ser Ile Pro Phe His Gln Leu Arg Asp Pro 40 45 Pro Pro Ser Leu Arg His Leu Gln Asp Leu Val Leu Phe Trp Ser Gly 50 55 60 Pro Leu Gln Thr Leu Asn His Gln Pro Ala Ala Phe Val Val Leu Asp 70 75 Val Ser Ala Asn Phe Ala Gly His Thr Gly Val Pro Lys Glu Val Lys 90 Val Ile Ile Leu Gly Arg Glu Gly Glu Gly Ser Lys Arg Gly Arg Met 105 Arg Phe Leu Gly Arg Gly Gly Val Lys Leu Val Pro Val Leu Cys Tyr 120 125 Cys Leu Leu Pro Ser Tyr Leu Asn Leu Lys Glu Leu Pro His Leu Gln 130 135 140 Gln Asp Leu Leu Gly Ile Gly Val Leu Leu Leu Ala Ile Asn Ser Cys 150 155 160 Leu Gln Gly Lys Gly Gly 165 <210> 3376 <211> 559 <212> PRT <213> Homo sapiens <400> 3376

 Met Ala Gly Leu Thr Ala Ala Ala Pro Arg Pro Gly Val Leu Leu Leu

 1
 5
 10
 15

 Leu Leu Ser He Leu His Pro Ser Arg Pro Gly Gly Val Pro Gly Ala
 20
 25
 30

 11e Pro Gly Gly Val Pro Gly Gly Val Pro Ha Leu Gly Pro
 35
 40
 45

 Gly Gly Lys Pro Leu Lys Pro Val Pro Gly Gly Leu Ala Gly Ala Gly
 50
 55
 60

Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe Pro Gly Ala

65					70					75					80
Leu	Val	Pro	G1y	Gly	Val	Ala	Asp	Ala	Ala	Ala	Ala	Tyr	Lys	Ala	Ala
				85					90					95	
Lys	Ala	Gly	Ala	Gly	Leu	Gly	Gly	Val	Pro	Gly	Val	Gly	Gly	Leu	Gly
			100					105					110		
Val	Ser	Ala	Ala	Pro	Ser	Val	Pro	G1 y	Ala	Val	Val	Pro	Gln	Pro	G1 y
		115					120					125			
Ala	G1y	Val	Lys	Pro	Gly	Lys	Val	Pro	Gly	Val	Gly	Leu	Pro	Gly	Val
	130					135					140				
Tyr	Pro	Gly	Gly	Val	Leu	Pro	Gly	Ala	Arg	Phe	Pro	Gly	Val	Gly	Val
145					150					155					160
Leu	Pro	Gly	Val	Pro	Thr	Gly	Ala	Gly	Val	Lys	Pro	Lys	Ala	Pro	Gly
				165					170					175	
Val	Gly	Gly	Ala	Phe	Ala	Gly	He	Pro	Gly	Val	Gly	Pro	Phe	G] y	Gly
			180					185					190		
Pro	Gln	Pro	Gly	Val	Pro	Leu	Gly	Tyr	Pro	He	Lys	Ala	Pro	Lys	Leu
		195					200					205			
Pro		Gly	Tyr	Gly	Leu		Tyr	Thr	Thr	Gly		Leu	Pro	Tyr	Gly
	210					215					220				
	Gly	Pro	G1 y	Gly		Ala	Gly	Ala	Ala		Lys	Ala	Gly	Tyr	
225		,			230					235					240
Thr	Gly	Thr	Gly		Gly	Pro	Gln	Ala		Ala	Ala	Ala	Ala		Lys
				245				_	250					255	
Ala	Ala	Ala	-	Phe	GIy	Ala	Gly		Ala	G1 y	Val	Leu		Gly	Val
	0.1		260	., 1	Б	61	., .	265	61	4.7	7.1	D	270	7.7	6.1
GIy	Gly		Gly	Val	Pro	GIy		Pro	Gly	Ala	116	Pro	GIV	116	GIy
61	т 1	275	C1	V 1	C1	TI	280	A 3 .	A1.	A 1	A1.	285	АТ.	A 1 -	A1.
бту		Ala	GIY	vai	GIŸ		rro	Ala	ATA	Ala		Ala	мта	дта	АТА
41a	290	1	A 1 a	Αla	1	295	C1	A1.0	Ala	410	300	Lau	Val	Dno	C1v
	мта	LyS	MIA	мта	310	I y I	Gly	Ala	мта	315	Oly	Leu	vai	110	320
305	Pro	Clv	Pho	Gl v		Clv	Val	Val	Cly		Pro	Gly	Δla	C1v	
U.I.y	110	Uly	1116	325	110	Oly	val	vai	330	Vai	110	Oly	MIG	335	val
Pro	Glv	Val	Glv		Pro	Glv	Ala	Glv		Pro	Val	Val	Pro		Ala
. 10	OIY	, 41	340	· C: 1	0	GIY	111 CI	345	.10	. 10		, (1)	350	013	iii d
Glv	He	Pro		Ala	Ala	Val	Pro		Val	Val	Ser	Pro		Ala	Ala

		355					360					365			
Ala	Lys	Ala	Ala	Ala	Lys	Ala	Ala	Lys	Tyr	Gly	Ala	Arg	Pro	Gly	Val
	370					375					380				
Gly	Val	G1 y	Gly	He	Pro	Thr	Tyr	Gly	Val	Gly	Ala	G1y	Gly	Phe	Pro
385					390					395					400
Gly	Phe	Gly	Val	Gly	Val	Gly	Gly	He	Pro	Gly	Val	Ala	Gly	Val	Pro
				405					410					415	
Gly	Val	Gly	Gly	Ser	Arg	Ser	Arg	Arg	Cys	Pro	Gly	Ser	Trp	His	Phe
			420					425					430		
Pro	Arg	Ser	Ser	Gly	Ser	Ser	Cys	Arg	Gln	G1 y	Cys	Gln	Val	Arg	Val
		435					440					445			
Ser	Ser	Trp	Cys	Arg	Arg	Gly	Ser	Trp	Ser	Trp	Arg	Gly	Ser	Trp	Cys
	450					455					460				
Arg	Cys	Gly	Ser	Trp	Ser	Trp	Leu	Gly	Ser	Trp	Ser	Trp	Arg	Gly	Ser
465					470					475					480
Trp	Ser	Trp	Cys	Gly	Ser	Trp	Arg	Trp	Arg	Gly	Ser	Arg	His	Trp	Pro
				485					490					495	
Trp	Trp	Ser	Cys	Ser	Cys	Ser	Lys	Ile	Arg	Cys	Gln	Gly	Gly	Cys	Gln
			500					505					510		
Ser	Pro	Ala	Pro	Ser	Cys	Ser	Trp	Ala	Trp	Cys	Trp	His	Pro	Trp	Thr
		515					520					525			
Trp	Ser	Trp	Cys	Arg	Arg	Pro	Trp	Thr	Trp	Ser	Trp	Cys	Trp	Cys	Ser
	530					535					540				
Trp	Thr	Trp	Ser	Trp	Cys	Trp	Cys	Ser	Trp	Leu	Arg	Gly	Ser	Thr	
545					550					555					

<210> 3377

<211> 190

<212> PRT

 $\langle 213 \rangle$ Homo sapiens

<400> 3377

Met Glu Gly Ser Arg Pro Ala Ala Pro Ala Glu Pro Gly Thr Leu Lys 1 5 5 10 10 15 Thr Ser Leu Val Ala Thr Pro Gly 11e Asp Lys Leu Thr Glu Lys Ser

			20					25					30		
Gln	Val	Ser	Glu	Asp	Gly	Thr	Leu	Arg	Ser	Leu	Glu	Pro	Glu	Pro	Gln
		35					40					45			
Gln	Ser	Leu	Glu	Asp	Gly	Ser	Pro	Ala	Lys	Gly	Glu	Pro	Ser	Gln	Ala
	50					55					60				
Trp	Arg	Glu	Gln	Arg	Arg	Pro	Ser	Thr	Ser	Ser	Ala	Ser	Gly	Gln	Trp
65					70					75					80
Ser	Pro	Thr	Pro	Glu	Trp	Val	Leu	Ser	Trp	Lys	Ser	Lys	Leu	Pro	Leu
				85					90					95	
Gln	Thr	He	Met	Arg	Leu	Leu	Gln	Val	Leu	Val	Pro	Gln	Val	Glu	Lys
			100					105					110		
He	Cys	Ile	Asp	Lys	Gly	Leu	Thr	Asp	Glu	Ser	Glu	Ile	Leu	Arg	Phe
		115					120					125			
Leu	Gln	His	Gly	Thr	Leu	Val	Gly	Leu	Leu	Pro	Val	Pro	His	Pro	He
	130					135					140				
Leu	Пe	Arg	Lys	Tyr	Gln	Ala	Asn	Ser	Gly	Thr	Ala	Met	Trp	Phe	Arg
145					150					155					160
Thr	Tyr	Met	Trp	Gly	Val	lle	Tyr	Leu	Arg	Asn	Val	Asp	Pro	Pro	Val
				165					170					175	
Trp	Tyr	Asp	Thr	Asp	Val	Lys	Leu	Phe	Glu	He	Gln	Arg	Val		
			180					185					190		

<210> 3378

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3378

Met Lys Pro His Lys Ser Leu Ala Arg His Ile Ile Ile Pro Val Leu I 5 10 15

Leu Ser Arg Lys Leu Ser Glu Arg Asp Tyr Arg Asn Cys Pro Gly His 20 25 30

Pro Ala Gly Lys Trp Arg lle Gln Val Ser Thr Pro Gly Pro Ala Pro 35 40 45

Ala Tyr Phe Leu Phe Ser Met Cys Glu Ile Gln Cys Tyr Pro Val Ser

50 60 55 Glu Ser Ser Val Arg Cys Gly Ser Cys His Pro Phe Leu Trp Pro Cys 70 75 65 80 Ser Leu Arg Leu Phe Lys Leu Leu Leu Ser Arg Thr Leu Phe His 85 90 Ile Ser Gln Pro Leu Asn Cys Leu Asn Gly Pro Arg Cys Leu Arg Pro 105 Ile Thr Ser Gly His Ala Lys Val Gly Phe Ala Val Pro Arg Arg Asp 115 120 125 Cys Ser Ala Gln Pro Arg Leu Pro Phe Pro Leu Pro Val Pro Ile Leu 135 140 Pro Cys Thr lle Cys Pro Leu His Gly Gln Gly Arg Gly Pro Ser Gly 150 155 160 Leu Phe Ala Gln Lys lle 165

<210> 3379

<211> 538

<212> PRT

<213> Homo sapiens

<400> 3379

Met Gly Leu Leu Leu Val Leu Ile Leu Thr Pro Ser Leu Ala Ala 1 5 10 15

Tyr Arg His Pro Asp Phe Pro Leu Leu Glu Lys Ala Gln Gln Leu Leu 20 25 30

Gln Ser Thr Gly Ser Pro Tyr Ser Thr Asn Cys Trp Leu Cys Thr Ser 35 40 45

Ser Ser Thr Glu Thr Pro Gly Thr Ala Tyr Pro Ala Ser Pro Arg Glu
50 55 60

Trp Thr Ser Ile Glu Ala Glu Leu His Ile Ser Tyr Arg Trp Asp Pro 65 70 75 80

Asn Leu Lys Gly Leu Met Arg Pro Ala Asn Ser Leu Leu Ser Thr Val

85

Lys	Gln	Asp	Phe	Pro	Asp	He	Arg	Gln	Lys	Pro	Pro	He	Phe	Gly	Pro
			100					105					110		
11e	Phe	Thr	Asn	lle	Asn	Leu	Met	Gly	lle	Ala	Pro	lle	Cys	Val	Met
		115					120					125			
Ala	Lys	Arg	Lys	Asn	Gly	Thr	Asn	Val	Gly	Thr	Leu	Pro	Ser	Thr	Val
	130					135					140				
Cys	Asn	Val	Thr	Phe	Thr	Val	Asp	Ser	Asn	Gln	Gln	Thr	Tyr	Gln	Thr
145					150					155					160
Tyr	Thr	His	Asn	Gln	Phe	Arg	His	Gln	Pro	Arg	Phe	Pro	Lys	Pro	Pro
				165					170					175	
Asn	Ile	Thr	Phe	Pro	Gln	Gly	Thr	Leu	Leu	Asp	Lys	Ser	Ser	Arg	Phe
			180					185					190		
Cys	Gln		Arg	Pro	Ser	Ser		Ser	Thr	Arg	Asn	Phe	Trp	Phe	Arg
		195					200					205			
Pro	Ala	Asp	Tyr	Asn	Gln		Leu	Gln	lle	Ser		Leu	Ser	Ser	Thr
	210				_	215					220			_	
	Glu	Trp	Val	Leu		Asp	GIn	Thr	Arg		Ser	Leu	Phe	Trp	
225	,	T)		0.1	230		0.1	0	0.1	235			** *		240
Asn	Lys	Ihr	Lys		Ala	Asn	GIn	Ser		Thr	Pro	Cys	Val		Val
Lau	۸1	C1	Mad	245	71.	A 1 -	Tl	C	250 T	1	C1	т 1	C	255	17 1
reu	Ala	GTy	мет 260	ını	116	мта	ınr		lyr	Leu	GIY	11e		Ala	vai
Sor	Glu	Dho		Clu	The	Can	Lau	265	Dno	Lou	Dha	u; a	270	11.5	11.
JE1	Gru	275	THE	оту	1111	Sei	280	1.11.1	LIO	Leu	rne	285	rne	ms	116
Ser	Thr		Lou	lve	Thr	Gln		Δla	Pho	Tur	110		G1 _v	Gln	Sor
561	290	Cys	Leu	LyS	1111	295	Ory	ма	THE	1 9 1	300	Cys	Oly	OIII	361
He	His	Gln	Cvs	l.eu	Pro		Asn	Trn	Thr	G1v		Cvs	Thr	He	G1 v
305			-,-		310				• • • • • • • • • • • • • • • • • • • •	315		0,0		110	320
	Val	Thr	Pro	Asp		Phe	Пе	Λla	Pro		Asn	Leu	Ser	Leu	
-				325					330	,				335	
lle	Pro	lle	Tyr		Asn	Ser	Pro	Leu		Arg	Val	Arg	Arg		He
			340					345				Ū	350		
His	Phe	He	Pro	Leu	Leu	Ala	Gly	Leu	G1 y	He	Leu	Ala	Gly	Thr	Gly
		355					360					365	-		-
Thr	Gly	Ile	Ala	Gly	lle	Thr	Lys	Ala	Ser	Leu	Thr	Tyr	Ser	Gln	Leu
	370					375					380				

Ser Lys Glu Ile Ala Asn Asn Ile Asp Thr Met Ala Lys Ala Leu Thr Thr Met Gln Glu Gln Ile Asp Ser Leu Ala Ala Val Val Leu Gln Asn 410 Arg Arg Gly Leu Asp Met Leu Thr Ala Ala Gln Gly Gly 11e Cys Leu 425 Ala Leu Asp Glu Lys Cys Cys Phe Trp Val Asn Gln Ser Gly Lys Val 440 445 Gln Asp Asn Ile Arg Gln Leu Leu Asn Gln Ala Ser Ser Leu Arg Glu 450 455 460 Arg Ala Thr Gln Gly Trp Leu Asn Trp Glu Gly Thr Trp Lys Trp Phe 470 475 Ser Trp Val Leu Pro Leu Thr Gly Pro Leu Val Ser Leu Leu Leu Leu 485 490 495 Leu Leu Phe Gly Pro Cys Leu Leu Asn Leu Ile Thr Gln Phe Val Ser 505 510 Ser Arg Leu Gln Ala Ile Lys Leu Gln Thr Asn Leu Ser Ala Gly Arg 520 525 His Pro Arg Asn Ile Gln Glu Ser Pro Phe 530 535

<210> 3380

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3380

Leu Ile Pro Glu Leu Arg Ala His Phe Glu Pro Thr Cys Glu Thr Glu Gly Val Asp Lys Asp Met Asp Glu Ala Glu Glu Gly Tyr Pro Pro Ala Thr Gly Pro Gly Gln Glu Ala Gln Pro His Gln Gln His Leu Ser Leu Gln Leu Gly Glu Leu Arg Gln Glu Thr Asn Arg Leu Leu Glu His Leu Val Glu Lys Glu Arg Glu Tyr Gln Asn Leu Leu Arg Gln Thr Leu Glu Gln Lys Thr Gln Glu Leu Tyr His Leu Gln Leu Lys Leu Lys Ser Asn Cys lle Thr Glu Asn Pro Ala Gly Pro Tyr Gly Gln Arg Thr Asp Lys Glu Leu lle Gly Trp Leu Arg Leu Gln Gly Ala Asp Ala Lys Thr Ile Glu Lys Ile Val Glu Glu Gly Tyr Thr Leu Ser Asp Ile Leu Asn Glu Ile Thr Lys Glu Asp Leu Arg Tyr Leu Arg Leu Arg Gly Gly Leu Leu Cys Arg Leu Trp Ser Ala Val Ser Gln Tyr Arg Arg Ala Gln Glu Ala Ser Glu Thr Lys Asp Lys Ala

<210> 3381

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3381

Met Glu Glu Val Arg Glu Gly His Ala Leu Gly Gly Gly Met Glu Ala

1 5 10 15

Asp Gly Pro Ala Ser Leu Gln Glu Leu Pro Pro Ser Pro Arg Ser Pro
20 25 30

Ser	Pro	Pro	Pro	Ser	Pro	Pro	Pro	Leu	Pro	Ser	Pro	Pro	Ser	Leu	Pro
		35					40					45			
Ser	Pro	Ala	Λla	Pro	Glu	Ala	Pro	Glu	Leu	Pro	Glu	Pro	Ala	Gln	Pro
	50					55					60				
Ser	Glu	Ala	His	Ala	Arg	Gln	Leu	Leu	Leu	Glu	G]u	Trp	G]y	Pro	Leu
65					70					75					80
Ser	Gly	Gly	Leu	Glu	Leu	Pro	Gln	Arg	Leu	Thr	Trp	Lys	Leu	Leu	Leu
				85					90					95	
Leu	Arg	Arg	Pro	Leu	Tyr	Arg	Asn	Leu	Leu	Arg	Ser	Pro	Asn	Pro	Glu
			100					105				٠	110		
Gly	lle	Asn	Ile	Tyr	Glu	Pro	Ala	Pro	Pro	Thr	Gly	Pro	Thr	Gln	Arg
		115					120					125			
Pro	Leu	Glu	Thr	Leu	Gly	Asn	Phe	Arg	Gly	Trp	Tyr	lle	Arg	Thr	Glu
	130					135					140				
Lys	Leu	Gln	Gln	Asn	Gln	Ser	Trp	Thr	Val	Lys	Gln	Gln	Cys	Val	Asp
145					150					155					160
Leu	Leu	Ala	Glu	Gly	Leu	Trp	Glu	Glu	Leu	Leu	Asp	Asp	Glu	Gln	Pro
				165					170					175	
Ala	lle	Thr	Val	Met	Asp	Trp	Phe	Glu	Asp	Ser	Arg	Leu	Asp	Ala	Cys
			180					185					190		
Val	Tyr	Glu	Leu	His	Val	Trp	Leu	Leu	Ala	Ala	Asp	Arg	Arg	Thr	Val
		195					200					205			
11e	Ala	Gln	His	His	Val	Ala	Pro	Arg	Thr	Ser	Gly	Arg	Gly	Pro	Pro
	210					215					220				
Gly	Arg	Trp	Val	Gln	Va]	Ser	His	Val	Phe	Arg	His	Tyr	Gly	Pro	Gly
225					230					235					240
Val	Arg	Phe	He	His	Phe	Leu	His	Lys	Ala	Lys	Asn	Arg	Met	Glu	Pro
				245					250					255	
Gly	Gly	Leu	Arg	Arg	Thr	Arg	Val	Thr	Asp	Ser	Ser	Val	Ser	Val	Gln
			260					265					270		
Leu	Arg	Glu													
		275													

<210> 3382 <211> 452

<212> PRT <213> Homo sapiens <400> 3382 Met Lys Val Gln Pro Ser Val Thr Cys Val Ala Ser Trp Gly Gly Ile Val His Leu Glu Ala Phe Gly Asp Pro Val Ile Val Leu Arg Gly Ala Trp Ala Val Pro Arg Val Asp Cys Leu Ile Asp Thr Leu Arg Thr Pro Asn Ala Ser Cys Met Arg Lys Gly Thr His Leu Leu Val Pro Cys Leu Glu Glu Glu Glu Leu Ala Leu His Arg Arg Arg Leu Asp Met Ser Glu Ala Leu Pro Cys Pro Gly Lys Glu Thr Pro Thr Pro Gly Cys Arg Leu Gly Ala Leu Tyr Trp Ala Cys Val His Asn Asp Pro Thr Gln Leu Gln Ala Ile Leu Asp Gly Gly Val Ser Pro Glu Glu Ala Thr Gln Val Asp Ser Asn Gly Arg Thr Gly Leu Met Val Ala Cys Phe His Gly Phe Gln Ser Val Val Ala Leu Leu Ser His Cys Pro Phe Leu Asp Val Asn Gln Gln Asp Lys Gly Gly Asp Thr Ala Leu Met Leu Ala Ala Gln Ala Gly His Val Pro Leu Val Ser Leu Leu Leu Asn Tyr Tyr Val Gly Leu Asp Leu Glu Arg Arg Asp Gln Arg Gly Leu Thr Ala Leu Met Lys Ala Ala Met Arg Asn Arg Cys Ala Asp Leu Thr Ala Val Asp Pro Val Arg Gly

210 215 220

Lys Thr Ala Leu Glu Trp Ala Val Leu Thr Asp Ser Phe Asp Thr Val
225 230 230 235 240

Trp Arg Ile Arg Gln Leu Leu Arg Arg Pro Gln Val Glu Gln Leu Ser
245 250 255

Arg His Tyr Lys Pro Glu Trp Pro Ala Leu Ser Gly Leu Val Ala Gln Ala Gln Ala Gln Ala Gln Val Ala Pro Ser Leu Leu Glu Arg Leu Gln Ala Thr Leu Ser Leu Pro Phe Ala Pro Ser Pro Gln Glu Gly Gly Val Leu Asp His Leu Val Thr Ala Thr Thr Ser Leu Ala Ser Pro Phe Val Thr Thr Ala Cys His Thr Leu Cys Pro Asp His Pro Pro Ser Leu Gly Thr Arg Ser Lys Ser Val Pro Glu Leu Leu Gly Thr Ala Pro Pro Pro Pro Leu Val Pro Gln Ser Pro Pro Gly Ser Pro Gln Arg Ser Pro Trp Val Phe Val Pro Tyr Gln Ser Pro Gln Gly Ile Leu Ser Lys Cys Leu Gln Trp Leu Gln Pro Arg Asp Ser Thr Ser Pro Arg Pro Gln Val Pro Lys Ile Leu Leu Ser Lys Ala Ser Ser Ser His Gln Cys Gln Pro Lys Pro Ser Pro Ser Gly His Gln Ser Leu Ala Leu Pro Leu Trp Arg Tyr Gln Glu Leu Arg Ile Glu Lys Arg Lys Gln Glu Glu Glu Ala Arg Met Ala Gln Lys

<210> 3383

<211> 409

<212> PRT

<213> Homo sapiens

<400> 3383

Met Val Glu Leu Phe lle Phe Leu Phe Leu Leu Gly Glu Thr Pro Phe 1 5 10 15

Lys	Val	Val	Val	Lys	Ser	Leu	Ser	Pro	Lys	Glu	Leu	Val	Arg	He	His
			20					25					30		
Val	Pro	Lys	Pro	Leu	Asp	Arg	Asn	Asp	Gly	Thr	Phe	Leu	Met	Arg	Tyr
		35					40					45			
Arg	Met	Tyr	Glu	Thr	Val	Asp	Glu	Gly	Leu	Lys	He	Glu	Val	Leu	Tyr
	50					55					60				
Gly	Asp	Glu	His	Val	Ala	Gln	Ser	Pro	Tyr	He	Leu	Lys	Gly	Pro	Val
65					70					75					80
Tyr	His	Glu	Tyr	Cys	Glu	Cys	Pro	Glu	Asp	Pro	Gln	Ala	Trp	Gln	Lys
				85					90					95	
Thr	Leu	Ser	Cys	Pro	Thr	Lys	Glu	Pro	Gln	He	Ala	Lys	Asp	Phe	Ala
			100					105					110		
Ser	Phe	Pro	Ser	He	Asn	Leu	Gln	Gln	Met	Leu	Lvs	Glu	Val	Pro	Lys
		115					120					125			
Arg	Phe	Gly	Asp	Glu	Arg	Gly	Ala	Пe	Val	His	Tyr	Thr	lle	Leu	Asn
	130					135					140				
Asn	His	Val	Tyr	Arg	Arg	Ser	Leu	Gly	Lys	Tyr	Thr	Asp	Phe	Lys	Met
145					150					155					160
Phe	Ser	Asp	Glu	He	Leu	Leu	Ser	Leu	Thr	Arg	Lys	Val	Leu	Leu	Pro
				165					170					175	
Asp	Leu	Glu	Phe	Tyr	Val	Asn	Leu	Gly	Asp	Trp	Pro	Leu	Glu	His	Arg
			180					185					190		
Lys	Val	Asn	Gly	Thr	Pro	Ser	Pro	He	Pro	Ile	He	Ser	Trp	Cys	Gly
		195					200					205			
Ser	Leu	Asp	Ser	Arg	Asp	Val	Val	Leu	Pro	Thr	Tyr	Asp	He	Thr	His
	210					215					220				
Ser	Met	Leu	Glu	Ala	Met	Arg	Gly	Va1	Thr	Asn	Asp	Leu	Leu	Ser	lle
225					230					235					240
Gln	61y	Asn	Thr	Gly	Pro	Ser	Trp	He	Asn	Lys	Thr	Glu	Arg	Ala	Phe
				245					250					255	
Phe	Arg	Gly	Arg	Asp	Ser	Arg	Glu	Glu	Arg	Leu	Gln	Leu	Val	Gln	Leu
			260					265					270		
Ser	Lys	Glu	Asn	Pro	Gln	Leu	Leu	Asp	Ala	Gly	lle	Thr	Gly	Tyr	Phe
		275					280					285			
Phe	Phe	Gln	G] u	Lys	Glu	Lys	Glu	Leu	Gly	Lys	Ala	Lys	Leu	Met	Gly

Phe Phe Asp Phe Phe Lys Tyr Lys Tyr Gln Val Asn Val Asp Gly Thr Val Ala Ala Tyr Arg Tyr Pro Tyr Leu Met Leu Gly Asp Ser Leu Val Leu Lys Gln Asp Ser Pro Tyr Tyr Glu His Phe Tyr Met Ala Leu Glu Pro Trp Lys His Tyr Val Pro Ile Lys Arg Asn Leu Ser Asp Leu Leu Glu Lys Val Lys Trp Ala Lys Ser Phe Thr Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr 11e Ser Thr His Cys Asn Leu Cys Leu Pro Gly Ser Arg Asn Phe Val Pro Gln Pro Pro Glu

<210> 3384

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3384

Met Arg Lys Pro Arg Glu Met Arg Gly Leu Ala Gln Gly Arg Gly Val His Ser Gln Leu Cys Leu Leu Leu Thr Gln Asn Lys Asp Leu Gly Thr Pro Arg Gly Ser Trp Pro Ser Gly Met Asp Ser Trp His Leu Arg Ala Ser Arg Leu Gln Pro Ser Gly Ser His Gly Cys Pro Lys Ser Ser Gly Pro Leu Leu Gly Ser Trp Leu Gly Cys Leu Ala Leu Pro Asp Arg Arg

Leu Leu Gly Ser Cys Leu Leu Gly Asp Ala Ser Cys Arg Ser Trp Cys
85 90 95

Gly Gly Gly Gly Gly Gly Phe Phe Leu Ser Leu Ser Leu Ser

```
105
            100
                                                     110
Ser Thr Phe Ser Pro Leu Pro Arg Gly Asn Gly Ser Arg Ile Ser Phe
                           120
                                               125
Lys Arg Met Leu Leu Tyr Phe Ala Ser Gly Trp Lys Val Ala Val Leu
    130
                        135
                                             140
Ala Pro Val Ser Cys Thr Trp Thr Pro Val
                    150
145
<210> 3385
<211> 141
<212> PRT
<213> Homo sapiens
<400> 3385
Met Val His Ala Cys Gln Val Ser Ser Glu Cys Ser Gly Cys Leu Arg
                                     10
Gly Gly Glu Glu Gly Met Pro Trp Leu Leu Pro Pro Leu Cys His His
                                                      30
             20
                                 25
Leu Pro Ala His Leu Gly Leu Lys Ser Val Trp Thr Ala Glu Ser Val
                             40
                                                  45
Ser Glu Lys Pro Val Leu Gly Gln Glu Leu Gly Asn Arg Ala Val Lys
                         55
Glu Val Gln Ser Gly Glu Glu Arg Arg Lys Leu Asp Leu Gly Thr Asp
                                                              80
65
                     70
                                          75
Arg 11e Pro Gln Ala Cys Ser Thr Ser Gln Pro Leu Tyr Ala Pro Thr
                                      90
Leu Gly Leu Trp Thr Gly Phe Met Phe Cys Leu lle Ser Val Pro Glu
            100
                                105
                                                     110
Ala Glu Met Gly Met Val Glu Arg Ser Ser Thr Gln Val Ala Pro Gly
                            120
Met Gly Met Ser Thr Pro Tyr Ser Pro Cys Val Ser Ser
    130
                                             140
                        135
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<211> 336
<212> PRT
<213> Homo sapiens
⟨400⟩ 3386
Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln His
                                     10
Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu Leu
             20
                                 25
                                                      30
Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu Ser
                             40
Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe Leu
                         55
Ala Leu Val Glu Glu Val Glu Asp Arg Gly Thr Val Val Ala Gln Gly
65
                     70
                                          75
Gly Gly Arg Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp Val Gly
                                     90
                 85
Gln Thr Lys Ala Ala Gln Ala Leu Ala Lys Leu Thr Ile Thr Ser Asn
            100
                                105
                                                     110
Pro Glu Met Thr Phe Pro Gly Glu Arg Ile Tyr Glu Val Val Arg Pro
        115
                            120
                                                 125
Leu Val Ser Leu Leu His Leu Asn Cys Ser Gly Leu Gln Asn Phe Glu
                        135
Ala Leu Met Ala Leu Thr Asn Leu Ala Gly lle Ser Glu Arg Leu Arg
145
                    150
Gln Lys Ile Leu Lys Glu Lys Ala Val Pro Met Ile Glu Gly Tyr Met
                                    170
Phe Glu Glu His Glu Met Ile Arg Arg Ala Ala Thr Glu Cys Met Cys
            180
                                185
                                                     190
Asn Leu Ala Met Ser Lys Glu Val Gln Asp Leu Phe Glu Ala Gln Gly
        195
                                                 205
                            200
Asn Asp Arg Leu Lys Leu Leu Val Leu Tyr Ser Gly Glu Asp Asp Glu
                        215
Leu Leu Gln Arg Ala Ala Ala Gly Gly Leu Ala Met Leu Thr Ser Met
225
                    230
                                         235
                                                             240
```

Arg Pro Thr Leu Cys Ser Arg Ile Pro Gln Val Thr Thr His Trp Leu

250 255 245 Glu Ile Leu Gln Ala Leu Leu Leu Ser Ser Asn Gln Glu Leu Gln His 265 270 Arg Gly Ala Val Val Leu Asn Met Val Glu Ala Ser Arg Glu Ile 275 280 285 Ala Ser Thr Leu Met Glu Ser Glu Met Met Glu 11e Leu Ser Val Leu 295 300 Ala Lys Gly Asp His Ser Pro Val Thr Arg Ala Ala Ala Cys Leu 305 310 315 320 Asp Lys Ala Val Glu Tyr Gly Leu lle Gln Pro Asn Gln Asp Gly Glu 325 330 335

<210> 3387

<211> 1088

<212> PRT

<213> Homo sapiens

<400> 3387

Met Ala Asn Gly Thr Ala Asp Val Arg Lys Leu Phe Ile Phe Thr Thr

1 5 10 15

Thr Gln Asn Tyr Phe Gly Leu Met Ser Glu Leu Trp Asp Gln Pro Leu
20 25 30

Leu Cys Asn Cys Leu Glu Ile Asn Asn Phe Leu Asp Asp Gly Asn Gln
35 40 45

Met Leu Leu Arg Val Gln Arg Ser Asp Ala Gly lle Ser Phe Ser Asn 50 55 60

Thr Ile Glu Phe Gly Asp Thr Lys Asp Lys Val Leu Val Phe Phe Lys
65 70 75 80

Leu Arg Pro Glu Val IIe Thr Asp Glu Asn Leu His Asp Asn IIe Leu 85 90 95

Val Ser Ser Met Leu Glu Ser Pro Ile Ser Ser Leu Tyr Gln Ala Val 100 105 110

Arg Gln Val Phe Ala Pro Met Leu Leu Lys Asp Gln Glu Trp Ser Arg 115 120 125

Asn Phe Asp Pro Lys Leu Gln Asn Leu Leu Ser Glu Leu Glu Ala Gly

	130					135					140				
Leu	Gly	Ile	Val	Leu	Arg	Arg	Ser	Asp	Thr	Asn	Leu	Thr	Lys	Leu	Lys
145					150					155					160
Phe	Lys	Glu	Asp	Asp	Thr	Arg	Gly	Пe	Leu	Thr	Pro	Ser	Asp	Glu	Phe
				165					170					175	
G1n	Phe	Trp	He	Glu	Gln	Ala	His	Arg	Gly	Asn	Lys	G1n	He	Ser	Lys
			180					185					190		
Glu	Arg	Ala	Asn	Tyr	Phe	Lys	Glu	Leu	Phe	Glu	Thr	He	Ala	Arg	Glu
		195					200					205			
Phe	Tyr	Asn	Leu	Asp	Ser	Leu	Ser	Leu	Leu	Glu	Val	Val	Asp	Leu	Val
	210					215					220				
Glu	Thr	Thr	Gln	Asp	Val	Val	Asp	Asp	Val	Trp	Arg	Gln	Thr	Glu	His
225					230					235					240
Asp	His	Tyr	Pro	Glu	Ser	Arg	Met	Leu	His	Leu	Leu	Asp	He]]e	Gly
				245					250					255	
Gly	Ser	Phe	Gly	Arg	Phe	Val	Gln	Lys	Lys	Leu	Gly	Thr	Leu	Asn	Leu
			260					265					270		
Trp	Glu	Asp	Pro	Tyr	Tyr	Leu		Lys	Glu	Ser	Leu	Lys	Ala	Gly	He
		275					280					285			
Ser		Cys	Glu	Gln	Trp		He	Val	Cys	Asn	His	Leu	Thr	Gly	Gln
	290					295					300				
	Trp	Gln	Arg	Tyr		Pro	His	Pro	Trp		Asn	Glu	Lys	Tyr	
305					310					315					320
Pro	Glu	Thr	Leu		Lys	Leu	Gly	Lys		Leu	Glu	G] u	Val	Leu	Ala
				325					330					335	0.1
He	Arg	Thr		His	Glu	Lys	Phe		Tyr	Phe	Leu	Pro		Ser	Glu
61	,	T 1	340	0	,	TD1		345	DI	67	D	DI	350	C1	
Glu	Lys		He	Cys	Leu	Ihr		Val	Phe	Glu	Pro		Inr	Gly	Leu
A	n	355	C1	т	Α	D	360	Tl	C1	D	1	365	1	۸1	A I -
Asn		vai	GIN	iyr	Asn		iyr	ınr	610	Pro		11.b	Lys	Ala	ата
V = 1	370	C1	Т	C1	1	375	11.	۸۱	Dua	A 1 a	380	C L n	Lua	11.	A1.5
	sei	GIII	Tyr	Giu		116	116	Ala	F10	395	03u	OHI	Lys	lle	400
385	lve	Lou	Lve	Acr	390	11.	Sor	C1.	116		Acn	Sor	Pro	G1n	
Oly	Lys	Leu	Lys	405	1 7 1	116	Jei	oru	410	OTH	ush	JC1	110	415	GIII
ىدە 1	ا ما	Gln	Ala		Len	lve	Tur	lve		ا ما	Val	Luc	Ara		Thr
LCU	Litt	0111	1110	1 116	Leu	Lys	1 7 1	1. y S	oru	1,00	• (1.1	17 1 13	1118	0	1 1 1 1

.

			420					425					430		
He	Ser	Lys	Glu	Leu	Met	Leu	Glu	Arg	Glu	Thr	Leu	Leu	Ala	Arg	Leu
		435					440					445			
Val	Asp	Ser	He	Lys	Asp	Phe	Arg	Leu	Asp	Phe	Glu	Asn	Arg	Cys	Arg
	450					455					460				
Gly	He	Pro	Gly	Asp	Ala	Ser	Gly	Pro	Leu	Ser	Gly	Lys	Asn	Leu	Ser
465					470					475					480
Glu	Val	Val	Asn	Ser	Ile	Val	Trp	Val	Arg	Gln	Leu	Glu	Leu	Lys	Val
				485					490					495	
Asp	Asp	Thr	lle	Lys	Ile	Ala	Glu	Ala	Leu	Leu	Ser	Asp	Leu	Pro	Gly
			500					505					510		
Phe	Arg	Cys	Phe	His	Gln	Ser	Ala	Lys	Asp	Leu	Leu	Asp	Gln	Leu	Lys
		515					520					525			
Leu	Tyr	Glu	Gln	Glu	Gln	Phe	Asp	Asp	Trp	Ser	Arg	Asp	He	Gln	Ser
	530					535					540				
Gly	Leu	Ser	Asp	Ser	Arg	Ser	Gly	Leu	Cys	Ile	Glu	Ala	Ser	Ser	Arg
545					550					555					560
Ile	Met	Glu	Leu	Asp	Ser	Asn	Asp	Gly	Leu	Leu	Lys	Val	His	Tyr	Ser
				565					570					575	
Asp	Arg	Leu	Val	Ile	Leu	Leu	Arg	Glu	Val	Arg	Gln	Leu	Ser	Ala	Leu
			580					585					590		
Gly	Phe	Val	lle	Pro	Ala	Lys	lle	Gln	G] n	Val	Ala	Asn	He	Λla	Gln
		595					600					605			
Lys	Phe	Cys	Lys	Gln	Ala	lle	lle	Leu	Lys	Gln	Val	Ala	His	Phe	Tyr
	610					615					620				
Asn	Ser	Ile	Asp	Gln	Gln	Met	Пе	Gln	Ser	Gln	Arg	Pro	Met	Met	Leu
625					630					635					640
Gln	Ser	Ala	Leu	Ala	Phe	Glu	Gln	11e	He	Lys	Asn	Ser	Lys	Ala	Gly
				645					650					655	
Ser	Gly	Gly	Lys	Ser	Gln	He	Thr	Trp	Asp	Asn	Pro	Lys	Glu	Leu	Glu
			660					665					670		
Gly	Tyr	lle	Gln	Lys	Leu	Gln	Asn	Ala	Ala	Glu	Arg	Leu	Ala	Thr	Glu
		675					680					685			
Asn	Arg	Lys	Leu	Arg	Lys	Trp	His	Thr	Thr	Phe	Cys	Glu	Lys	Val	Val
	690					695					700				

Val	Leu	Met	Asn	He	Asp	Leu	Leu	Arg	Gln	Gln	Gln	Arg	Trp	Lys	Asp
705					710					715					720
Gly	Leu	Gln	Glu		Arg	Thr	Gl y	Leu		Thr	Val	Glu	Ala		Gly
				725					730					735	
Phe	Gln	Ala	Ser	Asp	Met	His	Ala	Trp	Lys	Gln	His	Trp	Asn	His	Gln
			740					745					750		
Leu	Tyr	Lys 755	Ala	Leu	Glu	His	Gln 760	Tyr	Gln	Met	Gly	Leu 765	Glu	Ala	Leu
Asn	Glu	Asn	Leu	Pro	Glu	Ile	Asn	He	Asp	Leu	Thr	Tyr	Lys	Gln	Gly
	770					775			-		780	-	-		
Arg	Leu	Gln	Phe	Arg	Pro	Pro	Phe	Glu	Glu	lle		Ala	Lys	Tyr	Tyr
785				Ü	790					795	Ü		Ĭ	Š	800
	Glu	Met	Lvs	Arg	Phe	He	G1 v	He	Pro		Gln	Phe	Lvs	Glv	
Ü			-	805					810					815	
Gly	Glu	Ala	Gly	Asp	Glu	Ser	lle	Phe	Ser	He	Met	lle	Asp	Arg	Asn
			820					825					830		
Ala	Ser	Gly	Phe	Leu	Thr	Ile	Phe	Ser	Lys	Ala	Glu	Asp	Leu	Phe	Arg
		835					840					845			
Arg	Leu	Ser	Ala	Val	Leu	His	Gln	His	Lys	Glu	Trp	Ile	Val	Ile	G1 y
	850					855					860				
Gln	Val	Asp	Met	Glu	Ala	Leu	Val	Glu	Lys	His	Leu	Phe	Thr	Val	His
865					870					875					880
Asp	Trp	Glu	Lys	Asn	Phe	Lys	Ala	Leu	Lys	lle	Lys	Gly	Lys	Glu	Val
				885					890					895	
Glu	Arg	Leu	Pro	Ser	Ala	Val	Lys	Val	Asp	Cys	Leu	Asn	He	Asn	Cys
			900					905					910		
Asn	Pro	Val	Lys	Thr	Val	He	Asp	Asp	Leu	lle	Gln	Lys	Leu	Phe	Asp
		915					920					925			
Leu	Leu	Va]	Leu	Ser	Leu	Lys	Lys	Ser	He	Gln	Ala	His	Leu	His	Glu
	930	•				935					940				
lle	Asp	Thr	Phe	Val	Thr	G] u	Ala	Met	Glu	Va]	Leu	Thr	Пe	Met	Pro
945					950					955					960
Gln	Ser	Val	Glu	Glu	lle	Gly	Asp	Ala	Asn	Leu	Gln	Tyr	Ser	Lys	Leu
				965					970					975	
Gln	Glu	Arg	Lys	Pro	Glu	lle	Leu	Pro	Leu	Phe	Gln	Glu	Ala	Glu	Asp
			980					985					990		

Lys Asn Arg Leu Leu Arg Thr Val Ala Gly Gly Leu Glu Thr Ile Ser Asn Leu Lys Ala Lys Trp Asp Lys Phe Glu Leu Met Met Glu Ser His Gln Leu Met 11e Lys Asp Gln Ile Glu Val Met Lys Gly Asn Val Lys Ser Arg Leu Gln 11e Tyr Tyr Gln Glu Leu Glu Lys Phe Lys Ala Arg Trp Asp Gln Leu Lys Pro Gly Asp Asp Val Ile Glu Thr Gly Gln His Asn Thr Leu Asp Lys Ser Ala Lys Leu Ile Lys Glu Lys Lys Ile

<210> 3388

<211> 352

<212> PRT

<213> Homo sapiens

<400> 3388

Met Leu Leu Pro Asp Asp Phe Lys Ala Ser Ser Lys Ile Lys Val Asn Asn His Leu Phe His Arg Glu Asn Leu Pro Ser His Phe Lys Phe Lys Glu Tyr Cys Pro Gln Val Phe Arg Asn Leu Arg Asp Arg Phe Gly 11e Asp Asp Gln Asp Tyr Leu Val Thr Leu Thr Arg Asn Pro Pro Ser Glu Ser Glu Gly Ser Asp Gly Arg Phe Leu lle Ser Tyr Asp Arg Thr Leu Val lle Lys Glu Val Ser Ser Glu Asp lle Ala Asp Met His Ser Asn Leu Ser Asn Tyr His Gln Tyr 11e Val Lys Cys His Gly Asn Thr Leu Leu Pro Gln Phe Leu Gly Met Tyr Arg Val Ser Val Asp Asn Glu Asp

```
Ser Tyr Met Leu Val Met Arg Asn Met Phe Ser His Arg Leu Pro Val
                        135
His Arg Lys Tyr Asp Leu Lys Gly Ser Leu Val Ser Arg Glu Ala Ser
145
                    150
                                         155
                                                             160
Asp Lys Glu Lys Val Lys Glu Leu Pro Thr Leu Lys Asp Met Asp Phe
                165
                                    170
Leu Asn Lys Asn Gln Lys Val Tyr Ile Gly Glu Glu Glu Lys Lys Ile
            180
                                185
                                                    190
Phe Leu Glu Lys Leu Lys Arg Asp Val Glu Phe Leu Val Gln Leu Lys
                            200
                                                 205
        195
lle Met Asp Tyr Ser Leu Leu Gly Ile His Asp Ile Ile Arg Gly
                        215
                                            220
Ser Glu Pro Glu Glu Glu Ala Pro Val Arg Glu Asp Glu Ser Glu Val
                                         235
225
                    230
                                                             240
Asp Gly Asp Cys Ser Leu Thr Gly Pro Pro Ala Leu Val Gly Ser Tyr
                245
                                    250
Gly Thr Ser Pro Glu Gly 11e Gly Gly Tyr Ile His Ser His Arg Pro
            260
                                265
Leu Gly Pro Gly Glu Phe Glu Ser Phe Ile Asp Val Tyr Ala Ile Arg
        275
                            280
                                                 285
Ser Ala Glu Gly Ala Pro Gln Lys Glu Val Tyr Phe Met Gly Leu Ile
                        295
                                            300
Asp Ile Leu Thr Gln Tyr Asp Ala Lys Lys Lys Ala Ala His Ala Ala
                    310
                                         315
                                                             320
305
Lys Thr Val Lys His Gly Ala Gly Ala Glu lle Ser Thr Val His Pro
                325
                                     330
Glu Gln Tyr Ala Lys Arg Phe Leu Asp Phe Ile Thr Asn Ile Phe Ala
            340
                                345
                                                     350
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<210> 3389

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3389

Met Gln Pro Arg Ser Arg Trp Gln Ala Gln Asn Ser Glu Thr Lys Ser 10 His Gly Ala Lys Val Arg His Ala Phe Leu Ala His Leu Cys Val Lys 20 Lys Val Thr Gly Met Leu Thr Thr Gln Val Leu Gly Val Arg Pro Gly 40 Gln Arg Arg Gly Pro Cys Cys Ser Arg Ile Asp Arg Gln Leu Ala Ser 55 60 Lys Leu Gly Ala Gln Arg Gln Arg Leu Pro Ile His Leu Ser Thr Leu 65 70 75 80 Leu Ser His Leu Phe Pro Lys Asp Pro Lys Ala Leu His Ser Ile 90 85 Phe Gln Arg Asp Met Gly Val Glu Gly Met Glu Val Leu Ser His Leu 100 105 110 Leu Leu His Leu Glu Ala Pro Arg Ser Thr Asp Thr Asp His Pro 125 120 Leu Ser Val Lys Asn Val Leu Phe Gln Glu Ala Pro Gln Leu Arg Leu 135 Lys Glu Thr Ala Pro Pro Pro Gly 145 150

<210> 3390

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3390

Met Ala Cys Pro Ser Pro Val Ser Arg Arg Leu Ala Arg Ser Thr Leu

1 5 10 15

Leu Leu 11e Pro Leu Phe Gly Val His Tyr I1e Met Phe Ala Phe Phe $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Pro Asp Asn Phe Lys Pro Glu Val Lys Met Val Phe Glu Leu Val Val
35 40 45

Gly Ser Phe Gln Gly Phe Val Val Ala Ile Leu Tyr Cys Phe Leu Asn 50 55 60 <210> 3391

<211> 136

<212> PRT

<213> Homo sapiens

115

Gly Val Asp Cys Trp Val Met Trp

<400> 3391

Met Gly Met Lys Arg Glu His Phe Cys Tyr Leu Pro Asn Ser Trp Glu 10 Pro Val Asp Ser Leu His Pro His Ala Pro Gly Leu Ala Ala Thr Gly -25Leu Val Cys Val Ser Ser Met Cys Leu Phe Trp His Ile Ser Lys Val 35 40 45 Arg Tyr Ala Val Cys Gly Leu Val Ser Leu Ala Pro Phe Ala Glu His 55 60 Asn Val Phe Glu Val His Pro Phe Arg Ser Phe Glu Gly Cys Val Ala 65 70 75 80 Phe His Gly Val Ala Ile His Ser Cys Ala Tyr Gly Arg Leu Asp Cys 90 Val Gln Phe Leu Ala Thr Leu Asn Lys Ala Ser Val Asn Met Asp Ser 105

Leu Val Leu Glu Arg Met Tyr Val Leu Ser Leu Leu Cys Arg Cys Leu

125

130 135

<210> 3392 <211> 235 <212> PRT <213> Homo sapiens <400> 3392 Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe 10 Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile 25 Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser lle Arg Ser lle Gly 35 40 45 Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp 55 60 His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser 70 75 80 65 Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu 90 Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala 105 110 lle Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp 120 125 115 Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser 135 Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser 145 150 155 160 Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala IIe Glu Ala Leu Gly Ser 170 165 Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala 185 190 Ala Lys Gly Leu Glu Leu Pro Ser Glu lle Gln Arg Glu Lys Ile Asn 195 200 205

His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile

210 215 220 Gln lle Glu Gly Cys lle Pro Lys Glu Arg Ser 225 230 235

<210> 3393

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3393

Met Cys Ala Gln Asn Tyr Val Val Leu Leu Asp Ser Thr Leu Pro Arg 1 5 10 15

Ser Gln Tyr Asp Tyr Ile Leu Pro Gln Val Ser Phe Thr Ala Val Gly
20 25 30

Tyr His Lys His Ile Thr Leu Ile Phe Asn Pro Thr Arg Lys Leu Pro
35 40 45

Glu Gln Asp Ile Ala Gln Gly Ser Tyr Ile Ala Leu Pro Leu Thr Leu 50 55 60

Leu Val Leu Leu Ala Gly Tyr Asn His Asp Lys Leu Ile Pro Leu Leu 65 70 75 80

Leu Gln Leu Thr Ser Arg Leu Gln Gly Val Arg Ala Leu Gly Gln Ala 85 90 95

Ala Ser Asp Asn Ser Gly Pro Glu Asp Ala Lys Arg Gln Ala Lys Lys
100 105 110

Gln Lys Thr Arg Arg Thr

<210> 3394

<211> 548

<212> PRT

<213> Homo sapiens

<400> 3394

Met His Arg Leu Lys Cys Met Val Lys Ala Phe Phe Leu Thr Phe Cys

1				5					10					15	
Gln	Val	Ser	Ser	Glu	Asp	Arg	Ser	Ala	Leu	Trp	Ala	Leu	Val	Thr	Phe
			20					25					30		
Tyr	Gly	Gly	Asp	Cys	Gln	Leu	Thr	Leu	Asn	Lys	Lys	Cys	Thr	His	Leu
		35					40					45			
lle	Val	Pro	Glu	Pro	Lys	Gly	Glu	Lys	Tyr	Glu	Cys	Ala	Leu	Lys	Arg
	50					55					60				
Ala	Ser	lle	Lys	Ile	Val	Thr	Pro	Asp	Trp	Val	Leu	Asp	Cys	Val	Ser
65					70					75					80
Glu	Lys	Thr	Lys	Lys	Asp	Glu	Ala	Phe	Tyr	His	Pro	Arg	Leu	He	Ile
				85					90					95	
Tyr	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Val	Glu	Asn
			100					105					110		
Glu	Glu	Gln	Asp	Ser	Gln	Asn	Glu	Gly	Ser	Thr	Asp	Glu	Lys	Ser	Ser
		115					120					125			
Pro		Ser	Ser	Gln	Glu		Ser	Pro	Ser	Gly		Gln	Gln	Phe	Ser
	130					135					140				
	Lys	Ser	Asn	Thr		Lys	Ser	Lys	Gly		Leu	Met	Phe	Asp	
145	~				150			0.1		155				<i>m</i>	160
Ser	Ser	Asp	Ser		Pro	GJu	Lys	GIn		Arg	Asn	Leu	Asn		Thr
D	4.1	61	37 3	165	C 1	,	4.1	A 1	170	,	٨		,	175 D	C I
Pro	Ala	Glu		Pro	GIn	Leu	Ala		Ala	Lys	Arg	Arg		Pro	61n
<i>C</i> 1	Luc	C1	180	Clu	lan	11.	Aan	185	Cva	Ala	Aan	Val	190 Dra	Dno	Val
Oly	Lys	Glu 195	110	GIŸ	Leu	116	200	Leu	Cys	мта	ASII	205	L10	110	vai
Pro	Glv	Asn	مال	Lou	Pro	Pro		Val	Ara	Glv	Acn		Mot	Ala	Δla
110	210	11311	110	1,04	110	215		141	111 5	OLY	220	LCG	MC C	Mid	MIG
Glv		Asn	ł.eu	Gln	Ser			Arg	Ser	Glu	Met	11e	Ala	Thr	Trp
225					230			0		235					240
	Pro	Ala	Val	Arg		Leu	Arg	Asn	lle		Asn	Asn	Ala	Asp	
				245			Ü		250					255	
Gln	Gln	Met	Asn	Arg	Pro	Ser	Asn	Val	Ala	His	He	Leu	Gln	Thr	Leu
			260					265					270		
Ser	Ala	Pro	Thr	Lys	Asn	Leu	Glu	Gln	Gln	Val	Asn	His	Ser	Gln	Gln
		275					280					285			
Glv	His	Thr	Asn	Ala	Asn	Ala	Val	Leu	Phe	Ser	Gln	Val	Lvs	Val	Thr

	290					295					300				
Pro	Glu	Thr	His	Met	Leu	Gln	Gln	Gln	Gln	Gln	Ala	Gln	Gln	Gln	Gln
305					310					315					320
Gln	Gln	His	Pro	Val	Leu	His	Leu	Gln	Pro	Gln	Gln	He	Met	Gln	Leu
				325					330					335	
Gln	Gln	Gln	G1n	Gln	Gln	Gln	11e	Ser	Gln	Gln	Pro	Tyr	Pro	Gln	Gln
			340					345					350		
Pro	Pro	His	Pro	Phe	Ser	Gln	Ala	His							
		355					360					365			
Pro	His	Gln	Phe	Ser	Gln	Gln	Gln	Leu	Gln	Phe	Pro	Gln	Gln	Gln	Leu
	370					375					380				
His	Pro	Pro	Gln	Gln	Leu	His	Arg	Pro	Gln	Gln	Gln	Leu	Gln	Pro	Phe
385					390					395					400
Gln	Gln	Gln	His	Ala	Leu	Gln	Gln	Gln	Phe	His	Gln	Leu	Gln	Gln	His
				405					410					415	
Gln	Leu	Gln	Gln	Gln	Gln	Leu	Ala	Gln	Leu	Gln	Gln	Gln	His	Ser	Leu
			420					425					430		
Leu	Gln	He	Gln	Gln	Gln	Gln	Leu	Gln	Arg						
		435					440					445			
Met	His	Gln	Met	Gln	Ser	Gln	Thr	Ala	Pro						
	450					455					460				
His	Leu	Ser	Gln	Thr	Ser	Gln	Ala	Leu	Gln	His	Gln	Val	Pro	Pro	Gln
465					470					475					480
Gln	Pro	Pro	Gln	Pro	Pro	Pro	Ser	Pro	Gln						
				485					490					495	
Gln	His	Gln	Leu	Phe	Gly	His	Asp	Pro	Ala	Val	Glu	He	Pro	Glu	Glu
			500					505					510		
Gly	Phe	Leu	Leu	Gly	Cys	Val	Phe	Ala	lle	Ala	Asp	Tyr	Pro	Glu	Gln
		515					520					525			
Met	Ser	Asp	Lys	Gln	Leu	Leu	Ala	Thr	Trp	Lys	Arg	Va1	Arg	Leu	Cys
	530					535					540				
Leu	Glu	Glu	Gly												
545															

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⟨211⟩ 133
<212> PRT
<213> Homo sapiens
<400> 3395
Met Gly Ser Leu Met Ala Glu Met Val Val Lys Pro Thr Met Ser Leu
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Lys Tyr Ser Val Thr Cys Ser Lys Tyr Ser Gly Ser Thr Gly Val Pro
                                 25
Val Phe Lys Ala Ser Ala Thr Asp Leu Gly Met Ala Gly Ser Glu Val
                             40
Thr Trp Gly Pro Leu Tyr Leu Ala Gly Leu Gln Leu Pro Ser Gln Pro
                         55
                                             60
Thr Pro Ser His Trp His Pro Arg Arg Gln His Leu Cys Lys Gln Pro
 65
                     70
                                          75
                                                              80
Val Cys Leu Leu Phe Gln Leu Gln Leu Leu Arg Ala Leu Pro Asp
                                     90
Gln Ile Leu Gln Val Thr Arg Val Leu Leu Gln His Pro Lys His Arg
            100
                                105
                                                     110
Val Asn Asp Val Arg Leu Pro Ala Leu Val Asp Val Leu Glu Leu Ala
        115
                                                 125
                            120
Val Glu Gly Ser Trp
    130
<210> 3396
<211> 548
<212> PRT
<213> Homo sapiens
<400> 3396
Met Gln Pro Gly Leu Ser Pro Gly Ser Pro Gly Asp Pro Arg Pro Pro
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Thr Pro Glu Thr Asp Tyr Pro Glu Ser Leu Thr Ser Tyr Pro Glu Glu
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25

Asp Tyr Ser Pro Val Gly Ser Phe Gly Glu Pro Gly Pro Thr Ser Pro

20

		35					40					45			
Leu	Thr	Thr	Pro	Pro	Gly	Trp	Ser	Cys	His	Val	Ser	G1n	Asp	Lys	Gln
	50					55					60				
Met	Leu	Tyr	Thr	Asn	His	Phe	Thr	G1n	Glu	Gln	Trp	Val	Arg	Leu	Glu
65					70					75					80
Asp	Pro	His	Gly	Lys	Pro	Tyr	Phe	Tyr	Asn	Pro	Glu	Asp	Ser	Ser	Val
				85					90					95	
Arg	Trp	Glu	Leu	Pro	Gln	Val	Pro	Val	Pro	Ala	Pro	Arg	Ser	He	His
			100					105					110		
Lys	Ser	Ser	Gln	Asp	Gly	Asp	Thr	Pro	Ala	Gln	Ala	Ser	Pro	Pro	Glu
		115					120					125			
Glu	Lys	Val	Pro	Ala	Glu	Leu	Asp	Glu	Va]	Gly	Ser	Trp	Glu	Glu	Val
	130					135					140				
Ser	Pro	Ala	Thr	Ala	Ala	Val	Arg	Thr	Lys	Thr	Leu	Asp	Lys	Ala	Gly
145					150					155					160
Val	Leu	His	Arg	Thr	Lys	Thr	Ala	Asp	Lys	Gly	Lys	Arg	Leu	Arg	Lys
				165					170					175	
Lys	His	Trp		Ala	Ser	Trp	Thr		Leu	Glu	Gly	G1 y	Val	Leu	Thr
			180					185					190		
Phe	Phe		Asp	Ser	Lys	Thr		Ala	Ala	Gly	G1 y		Arg	Gln	Pro
		195					200					205			
Ser		Phe	Ser	Thr	Pro	Glu	Tyr	Thr	Val	Glu		Arg	Gly	Ala	Thr
	210		. 7			215		~			220			,	0.1
	Ser	Trp	Ala	Pro		Asp	Lys	Ser	Ser		Lys	Asn	Val	Leu	
225	A	C	A	۸	230	C	C1	т	1	235	C1	11.2 -	A	C	240
Leu	Arg	ser	Arg	245		Ser	GIU	lyr				nis	ASP	Ser 255	GIU
Ala	110	116	Con			uic	lva	Alo		Ala		C1 ₁₁	110		C1v
Ма	116	116	260	1111	116	1112	Lys	265	116	Ма	GIII	01 y	270	OIII	Glu
Lou	Ser	Ala		Leu	Pro	Pro	Glu		Ser	Glu	Sor	Ser		Val	Asp
Leu	561	275	0.14	Lcu	110	110	280	O, u	2,01	010	50.1	285	ше	, (1)	пар
Phe	Glv		Ser	Glu	Arø	Leu		Ser	Trn	Gln	Glu		Glu	Glu	Asp
	290	~~.		J14	6	295		~~.		~	300	, .		- 3 - 4	
Ala		Pro	Asn	Ala	Ala	Ala	Pro	Ala	Leu	G1 v		Val	G] v	Leu	G1 u
305	0				310	.,	0		_ = = •	315					320
	Asp	Leu	Ser	Lvs		Arg	His	Lvs	Leu		Lvs	Phe	Leu	Gln	Arg

				325					330					335	
Arg	Pro	Thr	Leu	Gln	Ser	Leu	Arg	Glu	Lys	G1 y	Tyr	Пe	Lys	Asp	Gln
			340					345					350		
Val	Phe	Gly	Cys	Ala	Leu	Ala	Ala	Leu	Cys	Glu	Arg	Glu	Arg	Ser	Arg
		355					360					365			
Val	Pro	Arg	Phe	Val	Gln	Gln	Cys	Пе	Arg	Ala	Val	Glu	Λla	Arg	Gly
	370					375					380				
Leu	Asp	lle	Asp	Gly	Leu	Tyr	Arg	lle	Ser	Gly	Asn	Leu	Ala	Thr	Ile
385					390					395				~	400
Gln	Lys	Leu	Arg	Tyr	Lys	Val	Asp	His	Asp	Glu	Arg	Leu	Asp	Leu	Asp
				405					410					415	
Asp	Gly	Arg	Trp	Glu	Asp	Val	His	Val	He	Thr	Gly	Alа	Leu	Lys	Leu
			420					425					430		
Phe	Phe	Arg	Glu	Leu	Pro	Glu	Pro	Leu	Phe	Pro	Phe	Ser	His	Phe	Arg
		435					440					445			
Gln	Phe	He	Ala	Ala	He	Lys	Leu	Gln	Asp	Gln	Ala	Arg	Arg	Ser	Arg
	450					455					460				
Cys	Va]	Arg	Asp	Leu	Val	Arg	Ser	Leu	Pro	Ala	Pro	Asn	His	Asp	Thr
465					470					475					480
Leu	Arg	Met	Leu	Phe	Gln	His	Leu	Cys	Arg	Val	He	Glu	His	Gly	Glu
				485					490					495	
Gln	Asn	Arg	Met	Ser	Va]	Gln	Ser	Va1	Ala	He	Val	Phe	Gly	Pro	Thr
			500					505					510		
Leu	Leu	_	Pro	Glu	Va]	Glu		Thr	Ser	Met	Pro		Thr	Met	Va]
		515					520					525			
Phe		Asn	Gln	Val	Val	Glu	Leu	He	Leu	Gln	Gln	Cys	Ala	Asp	He
	530					535					540				
Phe	Pro	Pro	His												
545															

<210> 3397

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3397 Met Met Asp Ala Ser Lys Glu Leu Gln Val Leu His Ile Asp Phe Leu 10 Asn Gln Asp Asn Ala Val Ser His His Thr Trp Glu Phe Gln Thr Ser 20 30 25 Ser Pro Val Phe Arg Arg Gly Gln Val Phe His Leu Arg Leu Val Leu 40 Asn Gln Pro Leu Gln Ser Tyr His Gln Leu Lys Leu Glu Phe Ser Thr 50 55 60 Gly Pro Asn Pro Ser Ile Ala Lys His Thr Leu Val Val Leu Asp Pro 70 75 Arg Thr Pro Ser Asp His Tyr Asn Trp Gln Ala Thr Leu Gln Asn Glu 90 Ser Gly Lys Glu Val Ser Thr His Trp Ala Gly Gly Trp Ala Gly Trp 100 105 110 Leu Leu Ala Glu Cys Ser 115 <210> 3398 <211> 115 <212> PRT <213> Homo sapiens ⟨400⟩ 3398 Met Pro Gly Ala Glu Met Trp Thr Glu Gly Asp Phe Ser Ala Ser Leu 10

Ala Gly Ala Cys Ser Lys Leu Ala Asp Ala Leu Cys Ala Cys Trp Ala
20 25 30

Arg Ser Pro Ser Ser Gly Glu Ala Leu Gly Leu Glu Gln Leu Gly Leu
35 40 45

Ser Trp Leu Leu Thr Pro Glu Pro Gly Ser Leu Leu Val Leu His Tyr
50 55 60

Leu Ala Thr Ser Ala Gln Gly Pro Asp Lys Arg Tyr Cys Leu Arg Ala
65 70 75 80

Thr Glu Asp Thr Gly Ala Gln Ser Trp Thr Thr Gly Pro Gly Pro Gly

90 95 85 Arg Thr Arg Arg Ser Arg Pro Ser Ala Ala Leu Trp Gly Arg Ser Pro 105 110 Trp Gly Cys 115 <210> 3399 <211> 102 <212> PRT <213> Homo sapiens <400> 3399 Met Leu Gln Phe Pro Gly Phe Leu Val Leu IIe Ile Pro Pro Arg Ser 1 5 10 15 Cys Leu Leu Gln Arg Ser Thr Val Gln Gln Glu Ala Glu Pro Met Pro 25 Leu Arg Gly Trp Arg Tyr Cys Ile Leu Pro Lys Ile Pro Ala Ser His 35 40 45 Ser Asn Asn Glu Pro Asn Ser Ala Glu Glu Leu Trp Ala Val Val Ser 55 Lys Thr Gln Ala Tyr Ser Leu Pro Pro Leu Pro Phe Leu Phe Arg Pro 70 75 Val Leu Thr Lys Arg Ile Leu Ala Leu Gln Ile Val Leu Tyr Phe Asp 90 95 85 Ala Phe Arg Ile Asn Ile 100

<210> 3400

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3400

Met Glu Val Val Val Ile His Ser Ser Pro Met Ser Arg Arg Tyr

1				5					10					15	
Ser	Phe	Leu	His	Leu	Trp	Glu	Cys	Gly	Ser	G1 y	Trp	Leu	Pro	Val	Asp
			20					25					30		
Ser	Pro	Pro	Arg	Thr	Gly	Leu	G1 y	His	Arg	Cys	Cys	Leu	Ala	Gln	Gly
		35					40					45			
His	Val	Pro	Ser	Pro	Arg	Ser	Ser	His	Thr	Lys	Trp	Leu	Ser	Cys	Val
	50					55					60				
His	Gln	Gly	Ser	Thr	Thr	Leu	G1 y	Ala	Thr	Thr	Ala	Pro	Gly	Leu	Pro
65					70					75					80
Val	Gly	Trp	Leu	Gly	Pro	Leu	Leu	Cys	Met	His	His	Ser	Pro	Thr	Ser
				85					90					95	
Leu	Gly	Pro	He	Leu	Lys	Ala	Val	Leu	His	Lys	Ala	Phe	Thr	Cys	Asn
			100					105					110		
Leu	Arg	Ala	Ser	Glu	Ser	Val	Pro	Trp	Gly	Ser					
		115					120								
	0> 34														
	1> 4														
	2> PI														
<217	3> Ho	omo s	sapı	ens											
<406)> 3 ²	401													
		Ser	Pro	Ala	His	Arg	Pro	Ala	Leu	Leu	Leu	Leu	Leu	Pro	Pro
1	,	~		5					10					15	
	Leu	Leu	Leu	Leu	Leu	Arg	Val	Pro		Ser	Arg	Ser	Phe		Asp
			20			Ŭ		25					30		•
Thr	Pro	Trp	Cys	Ser	Pro	He	Lys	Va]	Lys	Tyr	Gly	Asp	Val	Tyr	Cys
		35					40					45			
Arg	Ala	Pro	Gln	Gly	Gly	Tyr	Tyr	Lys	Thr	Ala	Leu	G1 y	Thr	Arg	Cys
	50					55					60				
Asp	lle	Arg	Cys	Gln	Lys	Gly	Tyr	Glu	Leu	His	Gly	Ser	Ser	Leu	Leu
65					70					75					80
He	Cys	Gln	Ser	Asn	Lys	Arg	Trp	Ser	Asp	Lys	Val	He	Cys	Lys	G1n

Lys	Arg	Cys	Pro	Thr	Leu	Ala	Met	Pro	Ala	Asn	Gly	Gly	Phe	Lys	Cys
			100					105					110		
Val	Asp	Gly	Ala	Tyr	Phe	Asn	Ser	Arg	Cys	Glu	Tyr	Tyr	Cys	Ser	Pro
		115					120					125			
Gly	Tyr	Thr	Leu	Lys	G1y	Glu	Arg	Thr	Val	Thr	Cys	Met	Asp	Asn	Lys
	130					135					140				
Ala	Trp	Ser	Gly	Arg	Pro	Ala	Ser	Cys	Val	Asp	Met	Glu	Pro	Pro	Arg
145					150					155					160
Ile	Lys	Cys	Pro	Ser	Val	Lys	Glu	Arg	lle	Ala	Glu	Pro	Asn	Lys	Leu
				165					170					175	
Thr	Val	Arg	Val	Ser	Trp	Glu	Thr	Pro	Glu	Gly	Arg	Asp	Thr	Ala	Asp
			180					185					190		
Gly	lle	Leu	Thr	Asp	Val	He	Leu	Lys	Gly	Leu	Pro	Pro	Gly	Ser	Asn
		195					200					205			
Phe	Pro	Glu	Gly	Asp	His	Lys	lle	Gln	Tyr	Thr	Val	His	Asp	Arg	Ala
	210					215					220				
Glu	Asn	Lys	Gly	Thr	Cys	Lys	Phe	Arg	Val	Lys	Val	Arg	Val	Lys	Arg
225					230					235					240
Cys	Gly	Lys	Leu	Asn	Ala	Pro	Glu	Asn	Gly	Tyr	Met	Lys	Cys	Ser	Ser
				245					250					255	
Asp	Gly	Asp	Asn	Tyr	Gly	Ala	Thr	Cys	Glu	Phe	Ser	Cys	Ile	Gly	Gly
			260					265					270		
Tyr	Glu	Leu	Gln	Gly	Ser	Pro	Ala	Arg	Val	Cys	Gln	Ser	Asn	Leu	Ala
		275					280					285			
Trp	Ser	Gly	Thr	Glu	Pro	Thr	Cys	Ala	Ala	Met	Asn	Val	Asn	Val	Gly
	290					295					300				
Val	Arg	Thr	Ala	Ala		Leu	Leu	Asp	Gln		Tyr	Glu	Lys	Arg	
305					310					315					320
Leu	Leu	lle	Va]		Thr	Pro	Thr	Ala		Asn	Leu	Leu	Tyr		Leu
				325					330					335	
Gln	Leu	Gly		Leu	G1n	Gln	Ala		Cys	Gly	Leu	Asp		Arg	His
			340					345					350		
lle	Thr		Val	Glu	Leu	Val	-	Val	Phe	Pro	Thr		He	Gly	Arg
		355	_				360					365			
He		Ala	Lys	He	Met	Pro	Pro	Ala	Leu	Ala		GIn	Leu	Arg	Leu
	370					375					380				

Leu Leu Arg Ile Pro Leu Tyr Ser Phe Ser Met Val Leu Val Asp Lys His Gly Met Asp Lys Glu Arg Tyr Val Ser Leu Val Met Pro Val Ala Leu Phe Asn Leu lle Asp Thr Phe Pro Leu Arg Lys Glu Glu Met Val Leu Gln Ala Glu Met Ser Gln Thr Cys Asn Thr

<210> 3402

<211> 555

<212> PRT

<213> Homo sapiens

<400> 3402 Met Gly Lys Trp Arg Pro Gly Gln Gly His Thr Thr Gly Ser Val Lys Pro Leu Ser Arg Ser Asp Ala Met Glu Leu Asp Leu Ser Pro Pro His 25 . Leu Ser Ser Pro Glu Asp Leu Cys Pro Ala Pro Gly Thr Pro Pro Gly Thr Pro Arg Pro Pro Asp Thr Pro Leu Pro Glu Glu Val Lys Arg Ser Gln Pro Leu Leu 11e Pro Thr Thr Gly Arg Lys Leu Arg Glu Glu Glu Arg Arg Ala Thr Ser Leu Pro Ser Ile Pro Asn Pro Phe Pro Glu Leu Cys Ser Pro Pro Ser Gln Ser Pro IIe Leu Gly Gly Pro Ser Ser Ala Arg Gly Leu Leu Pro Arg Asp Ala Ser Arg Pro His Val Val Lys Val Tyr Ser Glu Asp Gly Ala Cys Arg Ser Val Glu Val Ala Thr Gly

Ala Thr Ala Arg His Val Cys Glu Met Leu Val Gln Arg Ala His Ala

Leu	Ser	Asp	Glu	Thr	Trp	Gly	Leu	Val	Glu	Cys	His	Pro	His	Leu	Ala
				165					170					175	
Leu	Glu	Arg	Gly	Leu	Glu	Asp	His	Glu	Ser	Val	Val	Glu	Val	Gln	Ala
			180					185					190		
Ala	Trp	Pro	Val	Gly	Gly	Asp	Ser	Arg	Phe	Val	Phe	Arg	Lys	Asn	Phe
		195					200					205			
Ala	Lys	Tyr	Glu	Leu	Phe	Lys	Ser	Ser	Pro	His	Ser	Leu	Phe	Pro	Glu
	210					215					220				
Lys	Met	Val	Ser	Ser	Cys	Leu	Asp	Ala	His	Thr	Gly	lle	Ser	His	Glu
225					230					235					240
Asp	Leu	lle	Gln	Asn	Phe	Leu	Asn	Ala	Gly	Ser	Phe	Pro	Glu	He	Gln
				245					250					255	
Gly	Phe	Leu	Gln	Leu	Arg	Gly	Ser	Gly	Arg	Lys	Leu	Trp	Lys	Arg	Phe
			260					265					270		
Phe	Cys	Phe	Leu	Arg	Arg	Ser	Gly	Leu	Tyr	Tyr	Ser	Thr	Lys	Gly	Thr
		275					280					285			
Ser	Lys	Asp	Pro	Arg	His	Leu	Gln	Tyr	Val	Ala	Asp	Val	Asn	Glu	Ser
	290					295					300				
Asn	Val	Tyr	Val	Val	Thr	Gln	Gly	Arg	Lys	Leu	Tyr	Gly	Met	Pro	Thr
305					310					315					320
Asp	Phe	Gly	Phe	Cys	Val	Lys	Pro	Asn	Lys	Leu	Arg	Asn	Gly	His	Lys
				325					330					335	
Gly	Leu	Arg	He	Phe	Cys	Ser	Glu	Asp	Glu	Gln	Ser	Arg	Thr	Cys	Trp
			340					345					350		
Leu	Ala	Ala	Phe	Arg	Leu	Phe	Lys	Tyr	Gly	Val	Gln	Leu	Tyr	Lys	Asn
		355					360					365			
Tyr	Gln	Gln	Ala	Gln	Ser	Arg	His	Leu	His	Pro	Ser	Cys	Leu	Gly	Ser
	370					375					380				
Pro	Pro	Leu	Arg	Ser	Ala	Ser	Asp	Asn	Thr	Leu	Val	Ala	Met	Asp	Phe
385					390					395					400
Ser	Gly	His	Ala	Gly	Arg	Val	He	Glu	Asn	Pro	Arg	Glu	Ala	Leu	Ser
				405					410					415	
Val	Ala	Leu	Glu	Glu	Ala	Gln	Ala	Trp	Arg	Lys	Lys	Thr	Asn	His	Arg
			420					425					430		
Leu	Ser	Leu	Pro	Met	Pro	Ala	Ser	Gly	Thr	Ser	Leu	Ser	Ala	Ala	He
		435					440					445			

His Arg Thr Gln Leu Trp Phe His Gly Arg lle Ser Arg Glu Glu Ser Gln Arg Leu Ile Gly Gln Gln Gly Leu Val Asp Gly Leu Phe Leu Val Arg Glu Ser Gln Arg Asn Pro Gln Gly Phe Val Leu Ser Leu Cys His Leu Gln Lys Val Lys His Tyr Leu Ile Leu Pro Ser Glu Glu Glu Gly Arg Leu Tyr Phe Ser Met Asp Asp Gly Gln Thr Arg Phe Thr Asp Leu Leu Gln Leu Val Glu Phe His Gln Leu Asn Arg Gly Ile Leu Pro Cys Leu Leu Arg His Cys Cys Thr Arg Val Ala Leu

<210> 3403

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3403

Met Lys Ser Arg Leu Arg Arg Ser Gln Met Glu Met Arg Asp Leu Leu Gly Pro Gly Val Lys Val Thr Phe Val Arg Thr Leu Trp Leu Glu Thr Leu Cys Pro Cys Pro Arg Asn Leu Trp Asn Phe Glu Leu Glu Ser Glu Asp Leu Gly Tyr Leu Ala Glu Glu lle Ser Lys Gln Gln Ser Val Gln Asp Val Ala Trp Leu Leu Val Val Cys Ala His 11e Cys Glu Gln Arg His Asp Lys Lys Leu Glu Leu 11e Phe Lys Lys Glu Ala Glu Cys Lys Ser Leu Glu Asn Leu Gln Pro Gly His Val Val Glu Lys Lys Lys

Asn His Phe Leu Glu Arg Asn Ser Ser 115 120

<210> 3404

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3404

Met Pro Leu His Thr Leu Leu IIe Phe Pro Val Met Ser Ser Gly Ala 1 5 10 15

Leu Leu Leu Ala Val Ala Tyr Lys Ala Ser Trp Ser Gly Ser Lys Ala 20 25 30

Trp Gln Ser Leu Ser Gln Gly Lys Leu Gln Ala Ala Asn Ser Pro His
35 40 45

Gly Ser Ser Pro Ser Leu Pro Ala Gln Ser Pro Gly Gln Gly Pro Pro
50 55 60

Arg Lys Ala Leu Val Glu Asn Leu Cys Met Lys Ala Val Asn Gln Ser 65 70 75 80

Ile Gly Lys Pro Gly Cys Leu Gln Leu Gly Gly Gln Thr Gly Trp Arg
85 90 95

Arg Gly Glu Glu Glu Arg Gly Leu Pro Ala Leu Ser Pro Thr
100 105 110

<210> 3405

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3405

Met Thr Arg Gly Thr Gln Gly Leu Pro Met Thr Met Gly Pro Arg Gly

1 5 10 15

Arg His Leu Ala Gln Gly Pro Val Leu Glu Thr Asp Asp Pro Arg Arg

20 25 30

Arg Arg Gln Gly Arg Arg Glu Ala Gly Arg Ala Gly Met Val Ser Gln Ala Glu Gly Arg Thr Arg Thr Arg Met Glu Leu Gly Asn Asp Pro Gly 50 Val Phe Gly Gly Cys Arg Trp Val Arg Met Ala Val Gln Gly Gly Lys 70 75 Gly Cys Val Ala Gly Glu Gln Pro Gly Glu Ala Gln Thr Leu Leu Lys 85 90 Arg Cys Leu Leu Cys Arg Pro Pro His Pro Leu Pro Ala Pro Ser Gly 100 105 110 Ala Pro Ala Pro Pro Cys Ser Ala 115 120

<210> 3406

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3406

Met Arg Glu Val Gly Glu Ala Arg Glu Ala His Gly Ala Pro Ala Gln
1 5 10 15

Ala Pro His Thr Pro Ser Val Val Thr Val Ala His Glu Val Asn Ser 20 25 30

Pro Pro Pro Leu Gly Glu Lys Glu Ala Ala Trp Ala Ala Thr Cys Ser 35 40 45

Pro Ala Leu Pro Pro Pro Thr Ala Leu Met Asp Pro Ser Leu Pro Gly
50 55 60

Gly His Cys Phe Val Gly Phe Ser Pro Phe Val Gly Lys Gly Arg Cys
65 70 75 80

Pro Ala Gly Leu Gly Leu Val Arg Glu Glu Ser Arg Ala Leu Glu Arg 85 90 95

Gly Ala Gln His

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<211> 258
<212> PRT
<213> Homo sapiens ·
<400> 3407
Met Ala Ser Leu Leu Phe Leu Val Val Asn Leu Thr Cys Ala Met Leu
                  5
                                     10
Val His Gly Asp Val Pro Glu Asn Gln Leu Lys Trp Thr Val Phe Val
             20
                                 25
                                                      30
Arg Ala Leu Ile Asn Asp Ser Leu Phe Ile Leu Cys Ala Ile Ser Leu
                             40
                                                  45
Val Cys Tyr lle Cys Lys lle Thr Lys Met Ser Ser Ala Asn Val Tyr
     50
                         55
Leu Glu Ser Lys Gly Met Ser Leu Cys Gln Thr Val Val Val Gly Ser
                     70
                                          75
Val Val Ile Leu Leu Tyr Ser Ser Arg Ala Cys Tyr Asn Leu Val Val
                 85
                                     90
Val Thr Ile Ser Gln Asp Thr Leu Glu Ser Pro Phe Asn Tyr Gly Trp
            100
                                105
                                                     110
Asp Asn Leu Ser Asp Lys Ala His Val Glu Asp Ile Ser Gly Glu Glu
                            120
Tyr lle Val Phe Gly Met Val Leu Phe Leu Trp Glu His Val Pro Ala
    130
                        135
                                             140
Trp Ser Val Val Leu Phe Phe Arg Ala Gln Arg Leu Asn Gln Asn Leu
145
                    150
                                         155
                                                             160
Ala Pro Ala Gly Met Ile Asn Ser His Ser Tyr Ser Ser Arg Ala Tyr
                165
                                    170
Phe Phe Asp Asn Pro Arg Arg Tyr Asp Ser Asp Asp Leu Pro Arg
            180
                                185
                                                     190
Leu Gly Ser Ser Arg Glu Gly Ser Leu Pro Asn Ser Gln Ser Leu Gly
                            200
                                                 205
Trp Tyr Gly Thr Met Thr Gly Cys Gly Ser Ser Ser Tyr Thr Val Thr
   210
                                             220
                        215
Pro His Leu Asn Gly Pro Met Thr Asp Thr Ala Pro Leu Leu Phe Thr
225
                                         235
                    230
                                                             240
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<210> 3407

Cys Ser Asn Leu Asp Leu Asn Asn His His Ser Leu Tyr Val Thr Pro Gln Asn <210> 3408 <211> 199 <212> PRT <213> Homo sapiens <400> 3408 Met Ser Ala Thr Leu Arg Glu Arg Leu Arg Lys Thr Arg Phe Ser Phe Asn Ser Ser Tyr Asn Val Val Lys Arg Leu Lys Val Glu Ser Glu Glu Asn Asp Gln Thr Phe Ser Glu Lys Pro Ala Ser Ser Thr Glu Glu Asn Cys Leu Glu Phe Gln Glu Ser Phe Lys His Ile Asp Ser Glu Phe Glu Glu Asn Thr Asn Leu Lys Asn Thr Leu Lys Asn Leu Asn Val Cys Glu Ser Gln Ser Leu Asp Ser Gly Ser Cys Ser Ala Leu Gln Asn Glu Phe Val Ser Glu Lys Leu Pro Lys Gln Arg Leu Asn Ala Glu Lys Ala Lys Leu Val Lys Gln Val Gln Glu Lys Glu Asp Leu Leu Arg Arg Leu Lys Leu Val Lys Met Tyr Arg Ser Lys Asn Asp Leu Ser Gln Leu Gln Leu Leu 11e Lys Lys Trp Arg Ser Cys Ser Gln Leu Leu Leu Tyr Glu Leu

Gln Ser Ala Val Ser Glu Glu Asn Lys Lys Leu Ser Leu Thr Gln Leu

lle Asp His Tyr Gly Leu Asp Asp Arg Leu Leu His Tyr Asn Arg Ser

Glu Glu Glu Phe Ile Asp Val 195

<210> 3409

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3409

Met Pro Lys Gly Gly Cys Pro Lys Ala Pro Gln Gln Glu Glu Leu Pro

1 5 10 15

Leu Ser Ser Asp Met Val Glu Lys Gln Thr Gly Lys Lys Asp Lys Asp 20 25 30

Lys Val Ser Leu Thr Lys Thr Pro Lys Leu Glu Arg Gly Asp Gly Gly
35 40 45

Lys Glu Val Arg Glu Arg Ala Ser Lys Arg Lys Leu Pro Phe Thr Ala 50 55 60

Gly Ala Asn Gly Glu Gln Lys Asp Ser Asp Thr Gly Pro Pro Gly Ser 65 70 75 80

Cys Leu Ser Trp Gly Ser His Glu Gly Ala Leu Val Arg Ser Ala Met 85 90 95

Gly Arg Ser Cys Leu Pro Ser Ala Arg Gly Cys Phe Phe Gly Thr Arg 100 105 110

Gly Lys 11e Met 11e Phe Leu Phe Cys Phe Asp Leu 115 120

<210> 3410

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3410

Met Pro Phe Ala Glu Asp Lys Thr Tyr Lys Tyr Ile Cys Arg Asn Phe

1 5 10 15

Ser Asn Phe Cys Asn Val Asp Val Val Glu Ile Leu Pro Tyr Leu Pro Cys Leu Thr Ala Arg Asp Gln Asp Arg Leu Arg Ala Thr Cys Thr Leu 40 45 Ser Gly Asn Arg Asp Thr Leu Trp His Leu Phe Asn Thr Leu Gln Leu 55 Pro Thr Trp Ala Gly Glu Glu Thr Pro Gly Gly Gln Ser Ser Gly Arg 70 65 75 80 Gly Leu Asp Phe Ser Ser Leu Thr Ser Gly Ala Val Trp Leu Trp Gln 85 90 Met Ser Asp Phe Trp Ser Cys Phe Ser Thr Trp Thr Val Ser Ile Trp 105 Leu Ile Leu His Trp Val Leu Leu Arg Leu Asn Leu Gln Val Phe Ala 120 125 115 Lys Cys Leu Ala Gln Ser Lys Trp Pro Leu Leu Leu Pro Ser Leu Ser 130 135 140 Cys Pro Thr Trp 145 <210> 3411 <211> 527 <212> PRT <213> Homo sapiens <400> 3411 Met Leu Ala Lys Pro His Gln Arg Leu Thr Lys Tyr Pro Leu Leu Leu

Arg Ile Asp Ala Tyr Glu Val Val Glu Ser Ser Asp Glu Val Asp
65 70 75 80

Lys	Leu	Leu	Lys	Glu	Phe	Leu	His	Leu	Asp	Leu	Thr	Ala	Pro	lle	Pro
				85					90					95	
Gly	Ala	Ser	Pro	Glu	Glu	Thr	Arg	Gln	Leu	Leu	Leu	Glu	Gly	Ser	Leu
			100					105					110		
Arg	Met	Lys	Glu	Gly	Lys	Asp	Ser	Lys	Met	Asp	Val	Tyr	Cys	Phe	Leu
		115					120					125			
Phe	Thr	Asp	Leu	Leu	Leu	Val	Thr	Lys	Ala	Val	Lys	Lys	Ala	Glu	Arg
	130					135					140				
Thr	Arg	Val	Ile	Arg	Pro	Pro	Leu	Leu	Val	Asp	Lys	He	Val	Cys	Arg
145					150				,	155					160
Glu	Leu	Arg	Asp	Pro	Gly	Ser	Phe	Leu	Leu	lle	Tyr	Leu	Asn	Glu	Phe
				165					170					175	
His	Ser	Ala	Val	Gly	Ala	Tyr	Thr	Phe	Gln	Ala	Ser	Gly	Gln	Ala	Leu
			180					185					190		
Cys	Arg	Gly	Trp	Val	Asp	Thr	lle	Tyr	Asn	Ala	Gln	Asn	Gln	Leu	Gln
		195					200					205			
Gln	Leu	Arg	Ala	Gln	Glu	Pro	Pro	Gly	Ser	Gln	Gln	Pro	Leu	Gln	Ser
	210					215					220				
Leu	Glu	Glu	Glu	Glu	Asp	Glu	Gln	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu
225					230					235					240
Glu	Glu	Glu	Glu	Gly	Glu	Asp	Ser	Gly	Thr	Ser	Ala	Ala	Ser	Ser	Pro
				245					250					255	
Thr	Пе	Met	Arg	Lys	Ser	Ser	Gly	Ser	Pro	Asp	Ser	Gln	His	Cys	Ala
			260					265					270		
Ser	Asp	Gly	Ser	Thr	Glu	Thr	Leu	Ala	Met	Val	Val	Val	Glu	Pro	Gly
		275					280					285			
Asp		Leu	Ser	Ser	Pro	Glu	Phe	Asp	Ser	Gly		Phe	Ser	Ser	G]n
	290					295					300				
Ser	Asp	G1u	Thr	Ser		Ser	Thr	Thr	Ala		Ser	Ala	Thr	Pro	
305				_	310					315			_		320
Ser	Glu	Leu	Leu		Leu	Gly	Pro	Va]		Gly	Arg	Ser	Cys		Met
				325			_		330	_				335	
Asp	Ser	Ala		Gly	Thr	Leu	Ser		Thr	Ser	Leu	Gln		Phe	Val
		0.3	340			٥.	•	345	.	è		15	350		15
Ala	Pro		Pro	Met	Ala	Glu		Val	Pro	Arg	Ala		Glu	Ser	Pro
		355					360					365			

Arg Val Pro Ser Pro Pro Pro Ser Pro Arg Leu Arg Arg Arg Thr Pro Val Gln Leu Leu Ser Cys Pro Pro His Leu Leu Lys Ser Lys Ser Glu Ala Ser Leu Leu Gln Leu Leu Ala Gly Ala Gly Thr His Gly Thr Pro Ser Ala Pro Ser Arg Ser Leu Ser Glu Leu Cys Leu Ala Val Pro Ala Pro Gly Ile Arg Thr Gln Gly Ser Pro Gln Glu Ala Gly Pro Ser Trp Asp Cys Arg Gly Ala Pro Ser Pro Gly Ser Gly Pro Gly Leu Val Gly Cys Leu Ala Gly Glu Pro Ala Gly Ser His Arg Lys Arg Cys Gly Asp Leu Pro Ser Gly Ala Ser Pro Arg Val Gln Pro Glu Pro Pro Pro Gly Val Ser Ala Gln His Arg Lys Leu Thr Leu Ala Gln Leu Tyr Arg lle Arg Thr Thr Leu Leu Leu Asn Ser Thr Leu Thr Ala Ser Glu Val

<210> 3412

<211> 632

<212> PRT

<213> Homo sapiens

<400> 3412

 Met
 Trp
 Leu
 Lys
 Pro
 Glu
 Glu
 Glu
 Val
 Leu
 Leu
 Lys
 Asn
 Ala
 Leu
 Lys
 Leu

 1
 5
 5
 6
 10
 10
 10
 15
 15

 Trp
 Leu
 Met
 Glu
 Arg
 Ser
 Asn
 Asp
 Tyr
 Phe
 Val
 Leu
 Glu
 Arg
 Arg

 Gly
 Tyr
 Gly
 Glu
 Glu
 Gly
 Gly
 Gly
 Leu
 Thr
 Gly
 Leu
 Leu
 Val
 Gly

 Thr
 Leu
 Asp
 Ser
 Val
 Leu
 Asp
 Ser
 Thr
 Ala
 Lys
 Val
 Ala
 Pro
 Phe
 Arg

50 55 60

He	Leu	His	GIn	Thr	Pro	Asp	Ser	GIn	Val	Tyr	Leu	Ser	He	Ala	Cys
65					70					75					80
Gly	Ala	Asn	Arg	Glu	Glu	Пе	Thr	Lys	His	Trp	Лѕр	Trp	Leu	Glu	Gln
				85					90					95	
Asn	He	Met	Lys	Thr	Leu	Ser	Val	Phe	Asp	Ser	Asn	Glu	Asp	Пe	Thr
			100					105					110		
Asn	Phe	Val	Gln	Gly	Lys	Пe	Arg	Gly	Leu	He	Ala	Glu	Glu	Gly	Lys
		115					120					125			
His	Cys	Phe	Ala	Lys	Glu	Asp	Asp	Pro	Glu	Lys	Phe	Arg	Glu	Ala	Leu
	130		*			135					140				
Leu	Lys	Phe	Glu	Lys	Cys	Phe	Gly	Leu	Pro	Glu	Lys	Glu	Lys	Leu	Val
145					150					155					160
Thr	Tyr	Tyr	Ser	Cys	Ser	Tyr	Trp	Lys	G1 y	Arg	Val	Pro	Cys	Gln	Gly
				165					170					175	
Trp	Leu	Tyr	Leu	Ser	Thr	Asn	Phe	Leu	Ser	Phe	Tyr	Ser	Phe	Leu	Leu
			180					185					190		
Gly	Ser	Glu	lle	Lys	Leu	He	Ile	Ser	Trp	Asp	Glu	Val	Ser	Lys	Leu
		195					200					205			
Glu	Lys	Thr	Ser	Asn	Val	lle	Leu	Thr	Glu	Ser	Ile	His	Val	Cys	Ser
	210					215					220				
Gln	Gly	Glu	Asn	His	Tyr	Phe	Ser	Met	Phe	Leu	His	lle	Asn	Gln	Thr
225					230					235					240
Tyr	Leu	Leu	Met	Glu	Gln	Leu	Ala	Asn	Tyr	Ala	He	Arg	Arg	Leu	Phe
				245					250					255	
Asp	Lys	Glu	Thr	Phe	Asp	Asn	Asp	Pro	Val	Leu	Tyr	Asn	Pro	Leu	Gln
			260					265					270		
He	Thr	Lys	Arg	Gly	Leu	Glu	Asn	Arg	Ala	His	Ser	Glu	Gln	Phe	Asn
		275					280					285			
Ala	Phe	Phe	Arg	Leu	Pro	Lys	Gly	Glu	Ser	Leu	Lys	Glu	Val	His	Glu
	290					295					300				
Cys	Phe	Leu	Trp	Val	Pro	Phe	Ser	His	Phe	Asn	Thr	His	Gly	Lys	Met
305					310					315					320
Cys	lle.	Ser	Glu	Asn	Tyr	He	Cys	Phe		Ser	Gln	Asp	G1 y	Asn	Gln
				325					330					335	
Cys	Ser	Val	He	He	Pro	Leu	Arg	Glu	Va]	Leu	Ala	He	Asp	Lys	Thr

			340					345					350		
Asn	Asp	Ser	Ser	Lys	Ser	Val	He	lle	Ser	Пe	Lys	Gly	Lys	Thr	Ala
		355					360					365			
Phe	Arg	Phe	His	Glu	Val	Lys	Asp	Phe	Glu	Gln	Leu	Val	Ala	Lys	Leu
	370					375					380				
Arg	Leu	Arg	Cys	Gly	Ala	Ala	Ser	Thr	Gln	Tyr	His	Asp	lle	Ser	Thr
385					390					395					400
Glu	Leu	Ala	He	Ser	Ser	Glu	Ser	Thr	Glu	Pro	Ser	Asp	Asn	Phe	Glu
				405					410					415	
Val	Gln	Ser	Leu	Thr	Ser	Gln	Arg	Glu	Cys	Ser	Lys	Thr	Val	Asn	Thr
			420					425					430		
Glu	Ala	Leu	Met	Thr	Val	Phe	His	Pro	Gln	Asn	Leu	Glu	Thr	Leu	Asn
		435					440					445			
Ser	Lys	Met	Leu	Lys	Glu	Lys	Met	Lys	Glu	Gln	Ser	Trp	Lys	He	Leu
	450					455					460				
Phe	Ala	Glu	Cys	Gly	Arg	Gly	Val	Ser	Met	Phe	Arg	Thr	Lys	Lys	Thr
465					470					475					480
Arg	Asp	Leu	Val	Val	Arg	Gly	Ile	Pro	Glu	Thr	Leu	Arg	Gly	Glu	Leu
				485					490					495	
Trp	Met	Leu	Phe	Ser	Gly	Val	Val	Asn	Asp	Met	Ala	Thr	Asn	Pro	Asp
			500					505					510		
Tyr	Tyr	Thr	Glu	Val	Val	Glu	Gln	Ser	Leu	Gly	Thr	Cys	Asn	Leu	Ala
		515					520					525			
Thr	Glu	Glu	He	Glu	Λrg	Asp	Leu	Arg	Arg	Ser	Leu	Pro	Glu	His	Pro
	530					535					540				
Ala	Phe	Gln	Ser	Asp	Thr	Gly	lle	Ser	Ala	Leu	Arg	Arg	Val	Leu	Thr
545					550					555					560
Ala	Tyr	Ala	Tyr	Arg	Asn	Pro	Lys	lle	Gly	Tyr	Cys	Gln	Ala	Met	Asn
				565					570					575	
He	Leu	Thr	Ser	Val	Leu	Leu	Leu	Tyr	Ala	Lys	Glu	Glu	Glu	Ala	Phe
			580					585					590		
Trp	Leu	Leu	Val	Ala	Val	Cys	Glu	Arg	Met	Leu	Pro	Asp	Tyr	Phe	Asn
		595					600					605			
Arg	Arg	He	He	Gly	Ser		Asp	Phe	Met	Pro	Leu	Val	Arg	He	G1n
	610	•				615					620				
Gly.	Gln	Cys	Val	lle	G1v	Glu	Lys								

625 630

<210> 3413

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3413

Met Gly Leu Met Met Val Gly Val Leu lle Gly Thr Phe Ile Ala His

1 5 10 15

Val Val Cys Lys Arg Leu Leu Thr Ala Trp Val Ala Ala Arg Ile Gln
20 25 30

Ser Ser Glu Lys Leu Ser Ala Val 11e Arg Val Val Glu Gly Gly Ser 35 40 45

Gly Leu Lys Val Val Ala Leu Ala Arg Leu Thr Pro Ile Pro Phe Gly
50 55 60

Leu Gln Asn Ala Val Phe Ser Ile Thr Asp Leu Ser Leu Pro Asn Tyr 65 70 75 80

Leu Met Ala Ser Ser Val Gly Leu Leu Pro Thr Gln Leu Leu Asn Ser 85 90 95

Tyr Leu Gly Thr Thr Leu Arg Thr Met Glu Asp Val lle Ala Glu Gln 100 105 110

Ser Val Ser Gly Tyr Phe Val Phe Cys Leu Gln Ile Ile Ile Ser Ile 115 120 125

Gly Leu Met Phe Tyr Val Val His Arg Ala Gln Val Glu Leu Asn Ala 130 135 140

Ala Ile Val Ala Cys Glu Met Glu Leu Lys Ser Ser Leu Val Lys Gly
145 150 155 160

Asn Gln Pro Asn Thr Ser Gly Ser Ser Phe Tyr Asn Lys Arg Thr Leu 165 170 175

Thr Phe Ser Gly Gly Gly 11e Asn Val Val 180 185

<211> 156 <212> PRT <213> Homo sapiens <400> 3414 Met Gln Val Pro Pro Leu Tyr Ser Ala Leu Lys Lys Asp Gly Gln Arg 10 Leu Ser Thr Leu Met Lys Arg Gly Glu Val Val Glu Ala Lys Pro Ala 25 Arg Pro Val Thr Val Tyr Ser Ile Ser Leu Gln Lys Phe Gln Pro Pro 40 Phe Phe Thr Leu Asp Val Glu Cys Gly Gly Gly Phe Tyr Ile Arg Ser 55 60 Leu Val Ser Asp 11e Gly Lys Glu Leu Ser Ser Cys Ala Asn Val Leu 65 70 75 80 Glu Leu Thr Arg Thr Lys Gln Gly Pro Phe Thr Leu Glu Glu His Ala 90 Leu Pro Glu Asp Lys Trp Thr Ile Asp Asp Ile Ala Gln Ser Leu Glu 100 105 His Cys Ser Ser Leu Phe Pro Ala Glu Leu Ala Leu Lys Lys Ser Lys 125 120 Pro Glu Ser Asn Glu Gln Val Leu Ser Cys Glu Tyr Ile Thr Leu Asn 135 Glu Pro Lys Arg Glu Asp Asp Val Ile Lys Thr Cys

<210> 3415

145

<211> 373

<212> PRT

<213> Homo sapiens

<400> 3415

Met Arg Val Cys Ser Tyr Glu Cys Leu Pro Trp Glu Glu Ala Met Arg 1 5 10 15 Thr Glu Leu Gln Leu Glu Ser Arg Ser Ser Gly Ser Glu Arg Glu Glu

155

Arg Leu Int Int <th></th> <th></th> <th></th> <th>20</th> <th></th> <th></th> <th></th> <th></th> <th>25</th> <th></th> <th></th> <th></th> <th></th> <th>30</th> <th></th> <th></th>				20					25					30		
Pro	Arg	G]n	Arg	Leu	Glu	Thr	He	Leu	Ser	Leu	Cys	Ala	Glu	Tyr	Thr	Lys
The content of the			35					40					45			
14	Pro	Asp	Ser	Arg	Leu	Ser	Thr	Gly	Thr	Thr	Val	Glu	Asp	Val	Gln	Lys
65 70 71<		50					55					60				
Phe Glu Glu Lau Leu Het Ser Pro Asp Het Arg Grg Pro Asp Ala Asp Leu Ala Ser Het Fro Arg Leu Ala Asp Leu Ala Ser Arg Arg Arg Fro Arg Arg Bro Arg Arg Bro Arg Arg <td>He</td> <td>Asn</td> <td>Lys</td> <td>Glu</td> <td>Leu</td> <td>Glu</td> <td>Lys</td> <td>Leu</td> <td>Gln</td> <td>Leu</td> <td>Ser</td> <td>Asp</td> <td>Glu</td> <td>Glu</td> <td>Ser</td> <td>Val</td>	He	Asn	Lys	Glu	Leu	Glu	Lys	Leu	Gln	Leu	Ser	Asp	Glu	Glu	Ser	Val
	65					70					75					80
Lys Asp Leu Pro Asp Ala Asp Leu Ala Ser Cys Gly Ser Phe Pro Pro Pro Arg Ser Gly Arg Arg Arg Ser Arg Arg <td>Phe</td> <td>Glu</td> <td>Glu</td> <td>Ala</td> <td>Leu</td> <td>Met</td> <td>Ser</td> <td>Pro</td> <td>Asp</td> <td>Thr</td> <td>Arg</td> <td>Tyr</td> <td>Arg</td> <td>Cys</td> <td>His</td> <td>Arg</td>	Phe	Glu	Glu	Ala	Leu	Met	Ser	Pro	Asp	Thr	Arg	Tyr	Arg	Cys	His	Arg
Gln Ser Ala Ser Ala Ser Phe Phe Phe Thr Pro Arg Ser Thr Arg Arg Arg Arg Arg Arg Pro Pro <td></td> <td></td> <td></td> <td></td> <td>85</td> <td></td> <td></td> <td></td> <td></td> <td>90</td> <td></td> <td></td> <td></td> <td></td> <td>95</td> <td></td>					85					90					95	
Gln Ser Ala Ser Phe Arg Phe Phe <td>Lys</td> <td>Asp</td> <td>Ser</td> <td>Leu</td> <td>Pro</td> <td>Asp</td> <td>Ala</td> <td>Asp</td> <td>Leu</td> <td>Ala</td> <td>Ser</td> <td>Cys</td> <td>Gly</td> <td>Ser</td> <td>Phe</td> <td>Ser</td>	Lys	Asp	Ser	Leu	Pro	Asp	Ala	Asp	Leu	Ala	Ser	Cys	Gly	Ser	Phe	Ser
Leu 115 Image: color of the color o				100					105					110		
Leu Leu Asp Leu Thr Arg Thr Pro Pro Pro Pro Ser Ser Thr Phe 130 130 130 135 140	Gln	Ser	Ser	Ala	Ser	Phe	Phe	Thr	Pro	Arg	Ser	Thr	Arg	Asn	Asp	Glu
130 135 140 140 140 140 Pro 181 Ser 135 140 Pro 120 Ser 180 Ser 180 <th< td=""><td></td><td></td><td>115</td><td></td><td></td><td></td><td></td><td>120</td><td></td><td></td><td></td><td></td><td>125</td><td></td><td></td><td></td></th<>			115					120					125			
Pro Lys Ala Ser Glu Ser Gyr Leu Ser 11e Leu Pro Lys Pro Lys Ala Ser Glu Ser Glu Glu Glu Glu Glu Arg Arg Glu Ala Ala Ala Met Pro Glu Glu Glu Glu Glu Glu Glu Ala Ala Met Glu Glu Glu Ine Fro Glu Ine Ala Ala Ine	Leu	Leu	Ser	Asp	Leu	Thr	Arg	Thr	Pro	Pro	Pro	Pro	Ser	Ser	Thr	Phe
145		130					135					140				
Pro Glu G	Pro	Lys	Ala	Ser	Ser	Glu	Ser	Ser	Tyr	Leu	Ser	lle	Leu	Pro	Lys	Thr
175 176 177 178 179	145					150					155					160
Glu Glu Thr Arg Ile Val Leu Asn Leu Glu Glu Glu Leu Lys Glu Leu Lys Glu Leu Lys Glu Leu Leu Leu Lys 11e Lys Asp 11e Asp Glu Met Asp Glu Ser Phe Arg Glu Leu Asp Met Glu Cys Ala Leu Leu Asp Glu Glu Lys Glu Thr T	Pro	Glu	Gly	Ile	Ser	Glu	Glu	Gln	Arg	Ser	Gln	Glu	Leu	Ala	Ala	Met
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					165					170					175	
Lys 11e Lys Asp 11e Asp Asp Gln Met Asp Gln Ser Phe Arg Gln Leu Asp Met 195	Glu	Glu	Thr	Arg	Ile	Val	lle	Leu	Asn	Asn	Leu	Glu	Glu	Leu	Lys	Gln
195 200 205 205 205 195 195 195 195 196 196 197 198 <th< td=""><td></td><td></td><td></td><td>180</td><td></td><td></td><td></td><td></td><td>185</td><td></td><td></td><td></td><td></td><td>190</td><td></td><td></td></th<>				180					185					190		
Asp Met Glu Cys Ala Leu Leu Asp Gly Glu Gly Lys Glu Lys L	Lys	11e	Lys	Asp	Ile	Asn	Asp	Gln	Met	Asp	Glu	Ser	Phe	Arg	Glu	Leu
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$																
Glu Leu Met Lys Glu Lys Glu Ile Leu Asp His Leu Asp Arg Lys 1le 225 Lys Leu Glu Lys Asp 1le Val 235 Lys Thr Lys Glu Lys Val Ala Glu Lys Asp Ala Glu Arg Glu Lys Leu Glu Arg Lys Leu Arg Leu Arg Leu Arg Ile I	Asp		Glu	Cys	Ala	Leu		Asp	Gly	G] u	Gln	Lys	Ser	Glu	Thr	Thr
225 230 235 240 Ala Glu Leu Glu Lys Asn Ile Val Gly Glu Lys Glu																
Ala Glu Leu Glu Lys Asn Ile Val Glý Glu Lys Thr Lys Glu Lys Val 245		Leu	Met	Lys	Glu			He	Leu	Asp			Asn	Arg	Lys	
Lys Leu Asp Ala Glu Arg Glu Lys Leu Glu Arg Glu Cys Leu Glu Arg Leu Glu Glu Cys Leu Glu Glu Cys Leu Glu Glu Cys Leu Glu Glu Cys																
Lys Leu Asp Ala Glu Arg Glu Lys Leu Glu Arg Leu Gln Glu Leu Tyr 260	Ala	Glu	Leu	Glu		Asn	He	Val	Gly		Lys	Thr	Lys	Glu		Val
Ser Glu Gln Lys Thr Gln Leu Asp Asn Cys Pro Glu Ser Met Arg Glu 275 275 275 285	_											_				_
Ser Glu Gln Lys Thr Gln Leu Asp Asn Cys Pro Glu Ser Met Arg Glu 275	Lys	Leu	Asp		Glu	Arg	Glu	Lys		GJu	Arg	Leu	G]n		Leu	Tyr
275 280 285 Gln Leu Gln Gln Gln Leu Lys Arg Asp Ala Asp Leu Leu Asp Val Glu		<i>a</i> 1	0.1		m.	0.1				C	D	61	C			C.I
Gln Leu Gln Gln Gln Leu Lys Arg Asp Ala Asp Leu Leu Asp Val Glu	Ser	Glu		Lys	ihr	GIn	Leu		Asn	Cys	Pro	61u		Met	Arg	Glu
	C1			C1	C1	1	,		Α .	A T .	A	1		Λ	V - 1	C 1
790 795 300	GJħ		GIN	oin	GIN	Leu		arg	ASP	на	ASP		Leu	кѕр	va1	01 u
Ser Lys His Phe Glu Asp Leu Glu Phe Gln Gln Leu Glu His Glu Ser	Sor		Hic	Pho	61	Acr		61	Pho	Cla	Gla		Glas	Hic	Glu	Sor

Arg Leu Asp Glu Glu Lys Glu Asn Leu Thr Gln Gln Leu Leu Arg Glu Val Ala Glu Tyr Gln Arg Asn Ile Val Ser Arg Lys Glu Lys Ile Ser Ala Leu Lys Lys Gln Ala Asn His Ile Val Gln Gln Ala Gln Arg Glu Gln Asp His Phe Val <210> 3416 <211> 847 <212> PRT <213> Homo sapiens <400> 3416 Met Asn Ala Ser Asn Asp Ile Thr Met Glu Asn Val Val His Glu Leu Glu Leu Tyr Asn Thr Gly Tyr Tyr Leu Gly Met Phe Met Asn Ser Phe Ala Val Phe Gln Glu Cys Gly Leu Trp Val Leu Thr Asp Ala Asn Leu Thr Lys Asp Tyr lle Asp Gly Val Tyr Asp Asn Ala Glu Tyr Ala Glu Arg Phe Met Glu Glu Asn Glu Gly His Ile Val Asp Ile His Asp Phe Ser Leu Gly Ser Ser Pro His Val Arg Lys His Phe Pro Glu Thr Trp lle Trp Leu Asp Thr Asn Met Gly Ser Arg lle Tyr Gln Glu Phe Glu Val Thr Val Pro Asp Ser lle Thr Ser Trp Val Ala Thr Gly Phe Val lle Ser Glu Asp Leu Gly Leu Gly Leu Thr Thr Pro Val Glu Leu

Gln Ala Phe Gln Pro Phe Phe 11e Phe Leu Asn Leu Pro Tyr Ser Val

145					150					155					160
Πle	۸rg	Gly	Glu	Glu	Phe	Ala	Leu	Glu	He	Thr	Пе	Phe	Asn	Tyr	Leu
				165					170					175	
Lys	Asp	Ala	Thr	Glu	Val	Lys	Val	lle	He	Glu	Lys	Ser	Asp	Lys	Phe
			180					185					190		
Asp	lle	Leu	Met	Thr	Ser	Ser	Glu	lle	Asn	Ala	Thr	Gly	His	G1n	Gln
		195					200					205			
Thr	Leu	Leu	Val	Pro	Ser	Glu	Asp	Gly	Λla	Thr	Val	Leu	Phe	Pro	lle
	210		,			215					220				
Arg	Pro	Thr	His	Leu	Gly	Glu	Ile	Pro	He	Thr	Val	Thr	Ala	Leu	Ser
225					230					235					240
Pro	Thr	Ala	Ser	Asp	Ala	He	Thr	Gln	Met	He	Leu	Val	Lys	Ala	Glu
				245					250					255	
Gly	11e	Glu	Lys	Ser	Tyr	Ser	Gln	Ser	Пе	Leu	Leu	Asp	Leu	Thr	Asp
			260					265					270		
Asn	Arg	Leu	Gln	Ser	Thr	Leu	Lys	Thr	Leu	Ser	Phe	Ser	Phe	Pro	Pro
		275					280					285			
Asn	Thr	Val	Thr	Gly	Ser	Glu	Arg	Val	Gln	lle	Thr	Ala	Ile	Gly	Asp
	290					295					300				
Val	Leu	Gly	Pro	Ser	Ile	Asn	Gly	Leu	Ala	Ser	Leu	lle	Arg	Met	Pro
305					310					315					320
Tyr	Gly	Cys	Gly	Glu	Gln	Asn	Met	Πle	Asn	Phe	Ala	Pro	Asn	He	Tyr
				325					330					335	
He	Leu	Asp	Tyr	Leu	Thr	Lys	Lys	Lys	Gln	Leu	Thr	Asp	Asn	Leu	Lys
			340					345					350		
Glu	Lys	Ala	Leu	Ser	Phe	Met	Arg	Gln	Gly	Tyr	Gln	Arg	Glu	Leu	Leu
		355					360					365			
Tyr	Gln	Arg	Glu	Asp	Gly	Ser	Phe	Ser	Ala	Phe	Gly	Asn	Tyr	Asp	Pro
	370					375					380				
Ser	Gly	Ser	Thr	Trp	Leu	Ser	Ala	Phe	Val	Leu	Arg	Cys	Phe	Leu	Glu
385					390					395					400
Ala	Asp	Pro	Tyr		Asp	lle	Asp	Gln	Asn	Val	Leu	His	Arg	Thr	Tyr
				405					410					415	
Thr	Trp	Leu	Lys	Gly	His	Gln	Lys	Ser	Asn	G1y	Glu	Phe	Trp	Asp	Pro
			420					425					430		

Gly	Arg	Val	He	His	Ser	Glu	Leu	Gln	G1 y	G1 y	Asn	Lys	Ser	Pro	Val
		435					440					445			
Thr	Leu	Thr	Ala	Tyr	He	Val	Thr	Ser	Leu	Leu	Gly	Tyr	Arg	Lys	Tyr
	450					455					460				
Gln	Pro	Asn	He	Asp	Val	Gln	Glu	Ser	Пe	His	Phe	Leu	Glu	Ser	Glu
465					470					475					480
Phe	Ser	Arg	Gly	Ile	Ser	Asp	Asn	Tyr	Thr	Leu	Ala	Leu	Ile	Thr	Tyr
				485					490					495	
Ala	Leu	Ser	Ser	Val	Gly	Ser	Pro	Lys	Ala	Lys	Glu	Ala	Leu	Asn	Met
			500					505					510		
Leu	Thr	Trp	Arg	Ala	Glu	Gln	Glu	Gly	Gly	Met	Gln	Phe	Trp	Val	Ser
		515					520					525			
Ser	Glu	Ser	Lys	Leu	Ser	Asp	Ser	Trp	Gln	Pro	Arg	Ser	Leu	Asp	11e
	530					535					540				
Glu	Val	Ala	Ala	Tyr	Ala	Leu	Leu	Ser	His	Phe	Leu	Gln	Phe	Gln	Thr
545					550					555					560
Ser	Glu	Gly	Ile	Pro	lle	Met	Arg	Trp	Leu	Ser	Arg	Gln	Arg	Asn	Ser
				565					570					575	
Leu	Gly	Gly	Phe	Ala	Ser	Thr	Gln	Asp	Thr	Thr	Val	Ala	Leu	Lys	Ala
			580					585					590		
Leu	Ser	Glu	Phe	Ala	Ala	Leu	Met	Asn	Thr	Glu	Arg	Thr	Asn	Ile	G1n
		595					600					605			
Val	Thr	Val	Thr	Gly	Pro	Ser	Ser	Pro	Ser	Pro	Val	Lys	Phe	Leu	lle
	610					615					620				
Λsp	Thr	His	Asn	Arg	Leu	Leu	Leu	Gln	Thr	Ala	Glu	Leu	Ala	Val	Val
625					630					635					640
Gln	Pro	Thr	Ala	Val	Asn	He	Ser	Ala	Asn	Gly	Phe	Gly	Phe	Ala	He
				645					650					655	
Cys	Gln	Leu	Asn	Val	Val	Tyr	Asn	Val	Lys	Ala	Ser	Gly	Ser	Ser	Arg
			660					665					670		
Arg	Arg	Arg	Ser	11e	G1n	Asn	Gln	Glu	Ala	Phe	Asp	Leu	Asp	Val	Ala
		675					680					685			
Val	Lys	Glu	Asn	Lys	Asp	Asp	Leu	Asn	His	Val	Asp	Leu	Asn	Val	Cys
	690					695					700				
Thr	Ser	Phe	Ser	Gly	Pro	Gly	Arg	Ser	Gly	Met	Ala	Leu	Met	Glu	Val
705					710					715					720

Asn Leu Leu Ser Gly Phe Met Val Pro Ser Glu Ala Ile Ser Leu Ser Glu Thr Val Lys Lys Val Glu Tyr Asp His Gly Lys Leu Asn Leu Tyr Leu Asp Ser Val Asn Glu Thr Gln Phe Cys Val Asn Ile Pro Ala Val Arg Asn Phe Lys Val Ser Asn Thr Gln Asp Ala Ser Val Ser Ile Val Asp Tyr Tyr Glu Pro Arg Arg Gln Ala Val Arg Ser Tyr Asn Ser Glu Val Lys Leu Ser Ser Cys Asp Leu Cys Ser Asp Val Gln Gly Cys Arg Pro Cys Glu Asn Gly Ala Ser Gly Ser His His Ser Ser Val 11e Phe Ile Phe Cys Phe Lys Leu Leu Tyr Phe Met Glu Leu Trp Leu

<210> 3417

<211> 653

<212> PRT

<213> Homo sapiens

<400> 3417

Met Val Glu Leu Val Asn Ile Glu Pro Val Cys Val Arg Gly Gly Leu Tyr Glu Val Asp Val Thr Gln Gly Glu Cys Tyr Pro Val Tyr Trp Asn Gln Ala Asp Lys lle Pro Val Met Arg Gly Gln Trp Phe Ile Asp Gly Thr Trp Gln Pro Leu Glu Glu Glu Glu Ser Asn Leu Ile Glu Gln Glu His Leu Asn Cys Phe Arg Gly Gln Gln Met Gln Glu Asn Phe Asp 11e

Glu Val Ser Lys Ser Ile Asp Gly Lys Asp Ala Val His Ser Phe Lys

Leu	Ser	Arg	Asn	His	Val	Asp	Trp	His	Ser	Val	Asp	Glu	Val	Tyr	Leu
			100					105					110		
Tyr	Ser	Asp	Ala	Thr	Thr	Ser	Lys	He	Ala	Arg	Thr	Val	Thr	Gln	Lys
		115					120					125			
Leu	Gly	Phe	Ser	Lys	Ala	Ser	Ser	Ser	Gly	Thr	Arg	Leu	His	Arg	Gly
	130					135					140				
Tyr	Val	Glu	Glu	Ala	Thr	Leu	Glu	Asp	Lys	Pro	Ser	Gln	Thr	Thr	His
145					150					155					160
Ile	Val	Phe	Val	Val	His	Gly	He	Gly	Gln	Lys	Met	Asp	Gln	Gly	Arg
				165					170					175	
He	He	Lys	Asn	Thr	Ala	Met	Met	Arg	Glu	Ala	Ala	Arg	Lys	lle	Glu
			180					185					190		
Glu	Arg	His	Phe	Ser	Asn	His	Ala	Thr	His	Val	Glu	Phe	Leu	Pro	Val
		195					200					205			
Glu	Trp	Arg	Ser	Lys	Leu	Thr	Leu	Asp	Gly	Asp	Thr	Val	Asp	Ser	lle
	210					215					220				
Thr	Pro	Asp	Lys	Va]	Arg	Gly	Leu	Arg	Asp	Met	Leu	Asn	Ser	Ser	Ala
225					230					235					240
Met	Asp	He	Met	Tyr	Tyr	Thr	Ser	Pro	Leu	Tyr	Arg	Asp	Glu	Leu	Val
				245					250					255	
Lys	Gly	Leu	Gln	Gln	Glu	Leu	Asn	Arg	Leu	Tyr	Ser	Leu	Phe	Cys	Ser
			260		•			265					270		
Arg	Asn	Pro	Asp	Phe	Glu	Glu	Lys	Gly	Gly	Lys	Val	Ser	He	Val	Ser
		275					280					285			
His	Ser	Leu	Gly	Cys	Val	He	Thr	Tyr	Asp	lle	Met	Thr	Gly	Trp	Asn
	290					295					300				
Pro	Val	Arg	Leu	Tyr		G1n	Leu	Leu	Gln	Lys	Glu	Glu	Glu	Leu	Pro
305					310					315					320
Asp	Glu	Arg	Trp		Ser	Tyr	Glu	Glu		His	Leu	Leu	Asp		Leu
				325					330					335	
Tyr	He	Thr		Arg	Arg	Leu	Lys		lle	Glu	Glu	Arg		His	Gly
			340					345					350		
Leu	Lys		Ser	Ser	Met	Thr		Thr	Pro	Ala	Leu		Phe	Lys	Val
0.		355	12.1			a .	360					365			
Glu		Phe	Phe	Cys	Met	Gly	Ser	Pro	Leu	Ala		Phe	Leu	Ala	Leu
	370					375					380				

Arg	Gly	He	Arg	Pro	G1 y	Asn	Thr	Gly	Ser	Gln	Asp	His	lle	Leu	Pro
385					390					395					400
Arg	Glu	He	Cys	Asn	Arg	Leu	Leu	Asn	He	Phe	His	Pro	Thr	Asp	Pro
				405					410					415	
Val	Ala	Tyr	Arg	Leu	Glu	Pro	Leu	Пe	Leu	Lys	His	Tyr	Ser	Asn	He
			420					425					430		
Ser	Pro	Val	Gln	He	His	Trp	Tyr	Asn	Thr	Ser	Asn	Pro	Leu	Pro	Tyr
		435					440					445			
Glu	His	Met	Lys	Pro	Ser	Phe	Leu	Asn	Pro	Ala	Lys	Glu	Pro	Thr	Ser
	450					455					460				
Val	Ser	Glu	Asn	Glu	Gly	He	Ser	Thr	Пе	Pro	Ser	Pro	Val	Thr	Ser
465					470					475					480
Pro	Val	Leu	Ser	Arg	Arg	His	Tyr	Gly	Glu	Ser	He	Thr	Asn	He	Gly
				485					490					495	
Lys	Ala	Ser	lle	Leu	Gly	Ala	Ala	Ser	He	Gly	Lys	Gly	Leu	Gly	Gly
			500					505					510		
Met	Leu	Phe	Ser	Arg	Phe	Gly	Arg	Ser	Ser	Thr	Thr	Gln	Ser	Ser	Glu
		515					520					525			
Thr	Ser	Lys	Asp	Ser	Met	Glu	Asp	Glu	Lys	Lys	Pro	Val	Ala	Ser	Pro
	530					535					540				
Ser	Ala	Thr	Thr	Val	Gly	Thr	Gln	Thr	Leu	Pro	His	Ser	Ser	Ser	Gly
545					550					555					560
Phe	Leu	Asp	Ser	Ala	Tyr	Phe	Arg	Leu	Gln	Glu	Ser	Phe	Phe	Asn	Leu
				565					570					575	
Pro	Gln	Leu	Leu	Phe	Pro	Glu	Asn	Val	Met	Gln	Asn	Lys	Asp	Asn	Ala
			580					585					590		
Leu	Val	Glu	Leu	Asp	His	Arg		Asp	Phe	Glu	Leu		Glu	Gly	Leu
		595					600					605			
Val	Glu	Ser	Arg	Tyr	Trp	Ser	Ala	Val	Thr	Ser	His	Thr	Ala	Tyr	Trp
	610					615					620				
Ser	Ser	Leu	Asp	Val	Ala	Leu	Phe	Leu	Leu	Thr	Phe	Met	Tyr	Lys	His
625					630					635					640
Glu	His	Asp	Asp	Asp	Ala	Lys	Pro	Asn	Leu	Asp	Pro	He			
				645					650						

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<210> 3418
<211> 531
<212> PRT
<213> Homo sapiens
<400> 3418
Met Lys Gly Ala Arg Leu Phe Val Leu Leu Ser Ser Leu Trp Ser Gly
                                     10
Gly Ile Gly Leu Asn Asn Ser Lys His Ser Trp Thr Ile Pro Glu Asp
             20
                                 25
                                                      30
Gly Asn Ser Gln Lys Thr Met Pro Ser Ala Ser Val Pro Pro Asn Lys
                             40
                                                  45
lle Gln Ser Leu Gln lle Leu Pro Thr Thr Arg Val Met Ser Ala Glu
    50
                         55
lle Ala Thr Thr Pro Glu Lys Ala Glu Gly Val Val Lys Leu Gln Asn
                     70
Leu Thr Leu Pro Thr Asn Ala Ser Ile Lys Phe Asn Pro Gly Ala Glu
                 85
                                     90
Ser Val Val Leu Ser Asn Ser Thr Leu Lys Phe Leu Gln Ser Phe Ala
            100
                                105
                                                     110
Arg Lys Ser Asn Glu Gln Ala Thr Ser Leu Asn Thr Val Gly Gly Thr
                            120
Gly Gly 11e Gly Gly Val Gly Gly Thr Gly Gly Val Gly Asn Arg Ala
    130
                        135
Pro Arg Glu Thr Tyr Leu Ser Arg Gly Asp Ser Ser Ser Ser Gln Arg
                    150
                                         155
Thr Asp Tyr Gln Lys Ser Asn Phe Glu Thr Thr Arg Gly Lys Asn Trp
                165
                                    170
Cys Ala Tyr Val His Thr Lys Leu Ser Pro Thr Val Ile Leu Asp Asn
            180
                                185
                                                     190
Gln Val Thr Tyr Val Pro Gly Gly Lys Gly Pro Cys Gly Trp Thr Gly
                            200
Gly Ser Cys Pro Gln Arg Ser Gln Lys Ile Ser Asn Pro Val Tyr Arg
    210
                        215
                                             220
Met Gln His Lys Ile Val Thr Ser Leu Asp Trp Arg Cys Cys Pro Gly
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Tyr	Ser	Gly	Pro	Lys 245	Cys	Gln	Leu	Arg	Ala 250	Gln	Glu	Gln	Gln	Ser 255	Leu
lle	His	Thr	Asn	Gln	Ala	Glu	Ser	His	Thr	Ala	Val	Gly	Arg	Gly	Va1
			260					265					270		
Ala	Glu	Gln	Gln	Gln	Gln	Gln	Gly	Cys	Gly	Asp	Pro	Glu	Val	Met	Gln
		275					280					285			
Lys	Met 290	Thr	Asp	Gln	Val	Asn 295	Tyr	Gln	Ala	Met	Lys 300	Leu	Thr	Leu	Leu
Gln	Lys	Lys	Ile	Asp	Asn	lle	Ser	Leu	Thr	Val	Asn	Asp	Val	Arg	Asn
305					310					315					320
Thr	Tyr	Ser	Ser	Leu	Glu	Gly	Lys	Val	Ser	Glu	Asp	Lys	Ser	Arg	Glu
				325					330					335	
Phe	Gln	Ser	Leu	Leu	Lys	Glu	Glu	Tyr	Ser	Ser	Cys	Ser	Arg	His	Pro
			340					345					350		
Cys	Gln	Asn	Gly	Gly	Thr	Cys	He	Asn	Gly	Arg	Thr	Ser	Phe	Thr	Cys
		355					360					365			
Ala		Arg	His	Pro	Phe		Gly	Asp	Asn	Cys		He	Lys	Leu	Val
	370					375					380				
	Glu	Asn	Ala	Leu		Pro	Asp	Phe	Ser		Gly	Ser	Tyr	Arg	
385	Б		., 1		390	ENI.	. 1			395	Tr.	0.1		T)	400
Ala	Pro	Met	Val		Phe	Phe	Ala	Ser		Ihr	lyr	61 y	Met	Thr	116
D.	C1	D	11.	405	nı.			T	410	17 . 1		Т	C1	415	C
Pro	GIY	Pro		Leu	Pne	Asn	Asn		Asp	vai	Asn	lyr		Ala	Ser
Tur	The	Dno	420	Tha	C1.	Lvo	Dho	425	Ha	Dro	Tur	Lau	430	Vol	Тизэ
1 y 1	1111	435	AI g	1111	Oly	Lys	440	лів	116	110	1 y 1	445	01 y	Val	1) 1
Val	Phe	Lys	Tyr	Thr	He	Glu	Ser	Phe	Ser	Ala	His	Пе	Ser	G1 y	Phe
	450					455					460				
Leu	Val	Val	Asp	Gly	lle	Asp	Lys	Leu	Ala	Phe	Glu	Ser	Glu	Asn	He
465					470					475					480
Asn	Ser	Glu	11e	His	Cys	Asp	Arg	Val	Leu	Thr	Gly	Asp	Ala	Leu	Leu
				485					490					495	
Glu	Leu	Asn	Tyr	Gly	Gln	Glu	Va]	Trp	Leu	Arg	Leu	Ala	Lys	GI y	Thr
			500					505					510		
			500					000							
He	Pro	Ala		Phe	Pro	Pro	Val		Thr	Phe	Ser	G1 y		Leu	Leu

Tyr Arg Thr 530

<210> 3419

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3419

Met Gln Gln Gly Ser Ala Ser Thr Thr Pro Asp Gln Glu Leu Gln Asn
1 5 10 15

Cys Lys 11e Leu Asp Thr 11e Gly Arg Gly Thr Phe Ser Glu Val Gln
20 25 30

Asp His Met Leu Ile Gly Thr Gln Met Ala Ile Lys Ile Ile Pro Lys 35 40 45

Ala Gly Ser Leu Gly Ile Thr Leu Gln Arg Val Ile Ser Ile Leu Lys
50 55 60.

Leu Leu Cys His Phe Asn Ile Val Arg Leu Tyr Gln Val Ile Asp Thr 65 70 75 80

Pro Asn Thr Ser Tyr Leu Phe Ser Asn Gly Val Cys Lys Arg Arg Thr 85 90 95

Pro Thr Gln Pro lle His His His Gly Leu Met Arg Glu Glu Lys Ala 100 105 110

<210> 3420

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3420

Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly

1 5 10 15

Asn Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser

20 25 30

Gly Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu 50 Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn 70 75 Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln 85 90 Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr 100 105 110 Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe 120 Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe lle Ser Gly 130 135 140 Arg Ser Gly Ser Leu Ile Asp Ala lle Gly Leu His Trp Asp Val Tyr 150 155 160 Pro Thr Ser Cys Ser Arg Cys 165

<210> 3421

<211> 323 <212> PRT

<213> Homo sapiens

<400> 3421

Met 11e Gly Cys Leu His Ala Arg Val Ser Gly Pro Leu Trp Asp Ala
1 5 10 15

Gly Leu Cys Pro Ala Ser Ser Arg Ser Ala His Thr Cys Leu Ser Leu 20 25 30

Ser Val Ser Asp Ala Pro Val Ser Pro Ala Thr Ala Pro His Cys Leu 35 40 45

Leu Leu Ser Thr Ala Pro Ala Pro Pro Cys Pro Cys His Gly Val Leu 50 55 60

Asn Ser His Pro Phe Ser Pro Pro Phe Pro Gln Arg Pro Asp Gln Glu
65 70 75 80

Leu	Thr	Gly	Ser		Gly	His	Gly	Pro		Ser	Thr	Leu	Val		Ala
				85					90					95	
Lys	Ala	Met	Ala	Pro	Pro	Pro	Pro	Pro	Leu	Ala	Ala	Ser	Thr	Pro	Leu
			100	*				105					110		
Leu	His	Gly	Glu	Phe	Gly	Ser	Tyr	Pro	Ala	Arg	G1 y	Pro	Arg	Phe	Ala
		115					120					125			
Leu	Thr	Leu	Thr	Ser	Gln	Ala	Leu	His	lle	Gln	Arg	Leu	Arg	Pro	Lys
	130					135					140				
Pro	Glu	Ala	Arg	Pro	Arg	Gly	Gly	Leu	Val	Pro	Leu	Ala	Glu	Val	Ser
145					150					155					160
Gly	Cys	Cys	Thr	Leu	Arg	Ser	Arg	Ser	Pro	Ser	Asp	Ser	Ala	Ala	Tyr
				165					170					175	
Phe	Cys	He	Tyr	Thr	Tyr	Pro	Arg	Gly	Arg	Arg	Gly	Ala	Arg	Arg	Arg
			180					185					190		
Ala	Thr	Arg	Thr	Phe	Arg	Ala	Asp	Gly	Ala	Ala	Thr	Tyr	Glu	Glu	Asn
		195					200					205			
Arg	Ala	Glu	Ala	Gln	Arg	Trp	Ala	Thr	Ala	Leu	Thr	Cys	Leu	Leu	Arg
	210					215					220				
Gly	Leu	Pro	Leu	Pro	Gly	Asp	Gly	Gly	Glu	Val	Leu	Gly	Ser	Cys	Ser
225					230					235					240
He	Leu	Glu	Pro	Pro	Trp	Cys	Leu	Cys	Arg	Ile	Ser	Ser	He	Gly	Ser
				245					250					255	
Cys	Val	Phe	lle	Phe	Leu	Cys	Val	Trp	Val	Met	Tyr	Leu	Ser	Gly	Ser
			260					265					270		
Val	Arg	Ser	Asp	Thr	Gln	Gly	Trp	Ala	Thr	Glu	Gly	Thr	Lys	Arg	Gln
		275					280					285			
Glu	Asp	Arg	Met	Trp	Trp	Leu	Met	Ser	Val	He	Leu	Ala	lle	Trp	Glu
	290					295					300				
Ala	Glu	Ala	Gly	Gly	Ser	Pro	Glu	He	Arg	Ser	Ser	Arg	Pro	Ala	Trp
305					310					315					320
Leu	Thr	Trp													

<210> 3422

<21,1> 105

<212> PRT <213> Homo sapiens <400> 3422 Met Ser Val Val Pro Glu Lys Ser Gly Cys Leu Cys Leu Ala Ser Leu 10 His Thr Trp Ala Leu Thr Ser Arg Leu Leu Gly Ser Ser Ser Val 25 Ser Arg Ala Ala Val Leu Leu Leu Leu Val Phe Pro His Phe Pro Pro 35 40 45 Gly Lys Glu Arg Leu Pro Asn Ala Gly Met Glu Tyr Lys Gln Asn Val 55 Met Gly Ser Ala Val Thr Pro Pro Pro Glu Ala Glu Ala Val Leu Leu 65 70 75 80 Glu Asp Arg Arg His His Arg Val Phe Pro Leu Pro Leu Pro Leu 85 90 95 Leu Arg Asn Val Ser lle Pro Ile Gly 100 105 <210> 3423 <211> 133 <212> PRT <213> Homo sapiens <400> 3423 Met Val Lys Gly Gly Ser Ser lle Ile Ser Pro Asp Thr Asn Leu Leu 5 10 Asn Ile Lys Gly Ser His Ser Lys Ser Lys Asn Ser His Phe Phe Phe 20 25 Ser Asp Thr Val Lys Ile Thr Ala Phe Ser Lys Lys Asn Glu Asn Ile 40 Phe Asn Cys Asp Leu lle Asp Ser Val Asp Gln Ile Lys Asn Met Pro 50 55 60

Cys Leu Asp Leu Arg Glu Phe Gly Lys Asp Val Lys Pro Trp His Val

75

80

70

Glu Thr Thr Glu Ala Ala Arg Asn Asn Glu Asn Thr Gly Phe Asp Ala 90 Leu Ser His Glu Cys Thr Ala Lys Pro Leu Phe Pro Arg Val Glu Val 110 Gln Ser Glu Gln Leu Thr Val Glu Glu His lle Lys Arg Asn Arg Cys 120 125 Tyr Ser Asp Thr Glu 130 <210> 3424 <211> 139 <212> PRT <213> Homo sapiens <400> 3424 Met Ser Ile Arg Ser Asp Lys Ile Lys Asp Ile Asn Leu Met Phe Pro 5 10 Trp Pro Ala Leu Arg Cys Ala Gly Thr Asn Arg Leu Tyr Leu Leu Tyr 20 25 30 Phe Phe Pro Phe Phe Leu Lys Arg Ser Leu Ala Gln Ser Pro Arg Leu Glu Gly Ser Gly Ala 11e Ser Ala His Cys Arg Leu Arg Leu Pro 50 55 Gly Ser Arg Arg Ser Pro Ala Ser Ala Ser Arg lle Ala Gly Thr Thr 70 75 Gly Ala Arg His Tyr Ala Arg Leu lle Phe Cys Val Phe Leu Val Glu 90 85 Ala Gly Phe His His Val Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro 100 105 110 Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys 120 125 Val Arg Pro Leu Tyr Phe Phe Glu Leu Gln Thr

135

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<210> 3425
<211> 452
<212> PRT
<213> Homo sapiens
<400> 3425
Met Pro Trp Gly Lys Asn Ser Ser Pro His Trp Gly His His Leu Gly
Cys Leu Pro Ser Ala Pro Ala Cys Arg Ile Trp Arg Pro His Ser Arg
                                 25
Pro Ala Trp Glu Pro Pro Arg Pro Ser Pro Leu Leu Cys Gln Asp Met
                             40
                                                 45
Ala Leu Gln Asn Ala Leu Tyr Thr Gly Asp Leu Ala Arg Leu Gln Glu
     50
                         55
Leu Phe Pro Pro His Ser Thr Ala Asp Leu Leu Glu Ser Arg Ala
 65
                     70
                                         75
Ala Glu Pro Arg Trp Ser Ser His Gln Arg Gly Leu Trp Ser Leu Thr
                                     90
Tyr Glu Glu Glu Leu Thr Thr Pro Leu His Val Ala Ala Ser Arg Gly
            100
                                105
                                                     110
His Thr Glu Val Leu Arg Leu Leu Leu Arg Arg Arg Ala Arg Pro Asp
        115
                            120
                                                 125
Ser Ala Pro Gly Gly Arg Thr Ala Leu His Glu Ala Cys Ala Ala Gly
    130
                        135
His Thr Ala Cys Val His Val Leu Leu Val Ala Gly Ala Asp Pro Asn
                    150
                                        155
lle Ala Asp Gln Asp Gly Lys Arg Pro Leu His Leu Cys Arg Gly Pro
                165
                                    170
                                                         175
Gly Thr Leu Glu Cys Ala Glu Leu Leu Leu Arg Phe Gly Ala Arg Val
                                185
Asp Gly Arg Ser Glu Glu Glu Glu Glu Thr Pro Leu His Val Ala Ala
                            200
                                                205
Arg Leu Gly His Val Glu Leu Ala Asp Leu Leu Arg Arg Gly Ala
    210
                        215
                                            220
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Cys Pro Asp Ala Arg Asn Ala Glu Gly Trp Thr Pro Leu Leu Ala Ala

225					230					235					240
Cys	Asp	Val	Arg	Cys	Gln	Ser	He	Thr	Asp	Ala	Glu	Ala	Thr	Thr	Ala
				245					250					255	
Arg	Cys	Leu	Gln	Leu	Cys	Ser	Leu	Leu	Leu	Ser	Ala	Gly	Ala	Asp	Ala
			260					265					270		
Asp	Ala	Ala	Asp	Gln	Asp	Lys	G1n	Arg	Pro	Leu	His	Leu	Ala	Cys	Arg
		275					280					285			
Arg	Gly	His	Ala	Ala	Val	Val	Glu	Leu	Leu	Leu	Ser	Cys	Gly	Val	Ser
	290					295					300				
Ala	Asn	Thr	Met	Asp	Tyr	Gly	Gly	His	Thr	Pro	Leu	His	Cys	Ala	Leu
305					310					315					320
Gln	Gly	Pro	Ala	Ala	Ala	Leu	Ala	Gln	Ser	Pro	Glu	His	Val	Val	Arg
				325					330					335	
Ala	Leu	Leu	Asn	His	Gly	Ala	Val	Arg	Val	Trp	Pro	Gly	Ala	Leu	Pro
			340					345					350		
Lys	Val	Leu	Glu	Arg	Trp	Ser	Thr	Cys	Pro	Arg	Thr	He	Glu	Val	Leu
		355					360					365			
Met	Asn	Thr	Tyr	Ser	Val	Val	Gln	Leu	Pro	Glu	Glu	Ala	Val	Gly	Leu
	370					375					380				
Val	Thr	Pro	Glu	Thr	Leu	Gln	Lys	His	Gln	Arg	Phe	Tyr	Ser	Ser	Leu
385					390					395					400
Phe	Ala	Leu	Val	Arg	Arg	Pro	Arg	Ser	Leu	Gln	His	Leu	Ser	Arg	Cys
				405					410					415	
Ala	Pro	Arg	Ser	His	Leu	Glu	Gly	Ser	Leu	Pro	Gln	Ala	Leu	Pro	Arg
			420					425					430		
Leu	Pro	Leu	Pro	Pro	Arg	Leu	Leu	Arg	Tyr	Leu	Gln	Leu	Asp	Phe	Glu
		435					440					445			
Gly	Va]	Leu	Tyr												
	450														

<210> 3426

<211> 398

<212> PRT

<213> Homo sapiens

<400)> 34	126													
Met	Val	Thr	Leu	He	Thr	Glu	Lys	Leu	Gln	Ser	Gln	Ser	Leu	Asp	Asp
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Leu	Thr	Cys	Lys	Ala	Glu	Ala	Gly	Pro	Leu	Gln	Tyr	Ser	Ala	Glu	Thr
			20					25					30		
Leu	Asn	Lys	Ser	Gly	Arg	Leu	Phe	Pro	Leu	Glu	Leu	Asn	Asp	Gln	Ser
		35					40					45			
Pro	Trp	Lys	Val	Phe	Ser	Gly	Gly	Pro	Pro	Val	Arg	Ser	Gln	Ala	Ala
	50					55					60				
Thr	Gly	Pro	Asp	Phe	Ser	Phe	Leu	Pro	Gly	Leu	Ser	Ala	Ala	Ala	His
65					70					75					80
Thr	Met	Gly	Leu	Gln	Trp	Gln	Pro	Gln	Ser	Pro	Arg	Pro	Gly	Val	Gly
				85					90					95	
Leu	Gly	Ala	Ala	Ser	Thr	Val	Asp	Pro	Ser	Glu	Ser	Thr	Gly	Ser	Ser
			100					105					110		
Thr	Ala	Pro	Pro	Thr	Lys	Arg	His	Cys	Arg	Ser	Leu	Ser	Glu	Pro	Glu
		115					120					125			
Glu	Leu	Val	Arg	Cys	Arg	Ser	Pro	Trp	Arg	Pro	Gly	Ser	Ser	Lys	Val
	130					135					140				
Trp	Thr	Pro	Val	Ser	Lys	Arg	Arg	Cys	Asp	Ser	Gly	Gly	Ser	Ala	Thr
145					150					155					160
Arg	Gln	Gly	Ser	Pro	Gly	Ala	Val	Leu	Pro	Arg	Ser	Ala	Va]	Trp	Ser
				165					170					175	
Thr	Gly	Pro	Thr	Ser	Pro	Ala	Thr	Pro	Arg	Pro	Ser	Ser	Ala	Ser	Gly
			180					185					190		
Gly	Phe	Val	Asp	Ser	Ser	Glu	Gly	Ser	Ala	Gly	Ser	Gly	Pro	Leu	Trp
		195					200					205			
Cys	Ser	Ala	Glu	Ser	Cys	Leu	Pro	Ser	Thr	Arg	Arg	Arg	Pro	Ser	Leu
	210					215					220				
Ser	Gln	Glu	Arg	Leu		Gly	Ala	Gly	Thr	Pro	Leu	Pro	Trp	Ala	Ser
225					230					235					240
Ser	Ser	Pro	Thr		Thr	Pro	Ala	Leu		G1 y	Arg	Arg	Gly		Leu
				245					250					255	
Arg	Cys	Arg		Gln	Pro	Cys	Val		Ser	Gly	Lys	Arg	Ser	Arg	Arg
			260					265		_			270		
Lys	Arg	Arg	Arg	Glu	Glu	Asp	Ala	Arg	Trp	Thr	Arg	Pro	Ser	Leu	Asp

Phe Leu Lys Met Thr Gln Thr Leu Lys Asn Ser Lys Ser Leu Cys Ser Leu Asn Tyr Glu Asp Asp Asp Glu Asp Asp Thr Pro Val Lys Thr Val Leu Ser Ser Pro Cys Asp Ser Arg Gly Leu Pro Gly Ile Thr Met Pro Gly Cys Ser Gln Arg Gly Leu Arg Thr Ser Pro Val His Pro Asn Leu Trp Ala Ser Arg Glu Ser Val Thr Ser Asp Gly Ser Arg Arg Ser Ser Gly Asp Pro Arg Asp Gly Asp Ser Val Gly Glu Glu Gly Val Phe Pro Arg Ala Arg Trp Glu Leu Asp Leu Glu Gln Ile Glu Asn Asn

<210> 3427

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3427

Met Pro Ala Pro Met Val Val Ser Gly Lys Ala His Ser Ser Val Thr Phe Pro Phe Ser lle His Leu Arg Leu His Ala Leu Gln Leu Leu Gly Leu Cys Ser Cys His Ile Glu Glu Gly Gly Trp Ala Arg His Gly lle lle Leu Arg Ser Leu Leu His Gln Leu Leu Gly Thr Met Glu Tyr Pro Arg Val Val Thr Ala Asp Gly Ala Thr Trp Gly Arg Ala Gln Val Gly Gln Ala Thr Ala Gly Val Met Ala Cys Glu Pro Gln Ala Thr Ser

Gly Thr Phe Pro Thr Ala Ser Met Gln Gly Cys Arg Ala Met Val Pro

100 105 110 Phe Ser Thr Ala Leu Glu Leu 115 <210> 3428 <211> 148 <212> PRT <213> Homo sapiens <400> 3428 Met Asp Gln Ser Arg Gly Arg Gly Thr Ala Leu Glu Pro 11e Gly Gly 10 Leu Arg Met Ala Ser Leu Ser Gly Lys Asp Phe His Pro Asp Ser Phe 30 20 25 Arg Pro Gln Pro Gln Pro Ser Arg Arg Trp Ala Gly Leu Glu Glu Arg 40 Ser Ser Glu Arg Thr Ile Asn Leu Ser Val Leu His Phe Tyr Pro Ser 50 55 Pro Gln Glu Ser Pro Ser Leu Pro Ser Ala Val Arg Pro Phe Pro Gly 75 70 Ala Arg Gly Val Arg Ser Arg Ala Leu Met Gly Val Asn Cys Ser Leu 90 85 Asp Ser Val Lys Leu Ala Cys Trp Leu Gly Val Phe Pro Ile Trp Gly 110 100 105 Glu Ser Pro Leu Thr Asn Ser Pro Lys Ala lle His Arg Ala Phe Tyr 120 Ser Pro Thr Ser Thr Gln Leu Leu Tyr Arg Gln Arg Gln Arg Gln Thr 130 135 140 His Thr His Ser

<210> 3429

145

<211> 223

<212> PRT

<213> Homo sapiens

<400)> 34	129													
Met	Arg	Pro	Leu	Gly	Lys	Gly	Leu	Leu	Pro	Ala	Glu	Glu	Leu	He	Arg
l				5					10			•		15	
Ser	Asn	Leu	Gly	Val	Gly	Arg	Ser	Leu	Arg	Asp	Cys	Leu	Ser	Gln	Ser
			20					25					30		
Gly	Lys	Leu	Ala	Glu	Glu	Leu	Gly	Ser	Lys	Arg	Leu	Lys	Pro	Ala	Lys
		35					40					45			
Phe	Gly	Thr	Glu	Gly	Lys	Glu	Arg	Val	Glu	Gln	Arg	Thr	Glu	Arg	Gln
	50				-	55					60				
Arg	Thr	Gly	Ser	Ser	Lys	Glu	Pro	Arg	Met	Gln	He	lle	Cys	Arg	Arg
65					70					75					80
Arg	Trp	Arg	Glu	Pro	Pro	Pro	Arg	Leu	Leu	Trp	Gly	Cys	Leu	Met	Pro
				85					90					95	
Arg	Ala	Gln	Pro	Leu	Leu	His	Val	Thr	Ala	Tyr	Glu	Asn	Thr	Gly	His
			100					105					110		
Trp	Glu	Arg	Leu	Ala	Ser	Val	Val	Ser	Ser	Lys	Thr	Gln	G1n	Pro	Thr
		115					120					125			
Val	lle	Ser	His	Ser	Ser	lle	Ser	He	Thr	Phe	Ser	His	Tyr	Pro	Pro
	130					135					140				
Ala	Thr	Leu	Asp	Ser	Phe	Leu	Va]	Leu	Glu	Pro	He	Lys	Leu	Phe	Pro
145					150					155					160
Val	Ser	Ser	Leu	_	Ser	Pro	Leu	Cys	Leu	Asn	Cys	Gly	Ser		Arg
				165					170					175	
Glu	Ser	He	Arg	He	Ser	Gly	Glu		He	G1 y	Asn	Ala	His	Ser	Pro
			180					185					190		
Ala	Pro		Arg	Thr	Pro	Glu		Glu	Thr	Leu	Gly		Asp	Lys	G1n
		195	_				200					205			
Ala	Val	Leu	Ser	Gly	Ala	Gln	Val	Лlе	Leu	Val	Cys	Ala	Glu	Val	

215

220

<210> 3430

210

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3430

Met Val Thr Leu Met Gly Val Trp Leu Gly Pro Trp Gly Arg Gly Met

1 5 10 15

Ala Ala Pro Pro Thr Glu Gly Ala Ala Val Thr Pro Ala Ser Ser Pro 20 25 30

Gly Pro Gln Ala Ser Leu Ala Trp Arg Ser Ser Gly Ser Arg Pro Cys 35 40 45

Cys Pro Leu Thr Ala Ser Leu Thr Ser Pro Trp Arg Asn Gln Pro Leu 50 55 60

His Thr Ala Pro Ser Gly Gly Gly Cys Cys Val Thr Gly Pro Ala Cys
65 70 75 80

Ser lle Ala Trp Ala Gly Arg Ser Pro Pro Ser Arg Trp Ile Phe Gln
85 90 95

Arg Gly Leu Thr Ala Thr Ser Thr Leu Pro Gly Ser Cys Trp Lys Gly
100 105 110

Arg Ser Ser Ala Ser Trp Pro His Thr Gly Ala Val Cys Cys Pro Ala 115 120 125

Pro Ala Pro Cys 130

<210> 3431

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3431

Met Glu Gln Asp Asn Ser Pro Arg Lys Ile Gln Phe Thr Val Pro Leu

1 5 10 15

Leu Glu Pro His Leu Asp Pro Glu Ala Ala Glu Gln 11e Arg Arg Arg 20 25 30

Arg Pro Thr Pro Ala Thr Leu Val Leu Thr Ser Asp Gln Ser Ser Pro
35 40 45

Glu lle Asp Glu Asp Arg lle Pro Asn Pro His Leu Lys Lys Leu Gln

Asn Ala Ser Leu Lys Leu Thr Arg Glu Ala Val Arg Asn Pro Ala Gln Lys Asn Pro Gln Pro Ile Tyr His His Trp Ile Pro Arg Glu Pro Thr Arg Ser Glu Arg Arg Gly Gly Thr Gly Gly Gln Lys Ser Val Gly Gly Phe Pro Cys Ser Thr His Thr Leu Ala Pro Phe Tyr Val Phe Thr Arg Ser Ile Leu Leu Lys Arg Gly Glu Arg Met Ser His Pro Leu Glu Pro Arg Asp Asp Pro Thr Lys Met Pro ⟨210⟩ 3432 <211> 387 <212> PRT <213> Homo sapiens <400> 3432 Met Ser Ser Pro Pro Ala Leu Arg Asp Ser Pro Val Cys Pro Arg Tyr Ser Pro Thr Thr Pro Thr Phe Gln Leu Glu Ser Leu Ala Gly Thr Gln Glu Leu Pro Thr Asn Ser Ala Val Ala Leu Ser Tyr Ser Pro Val Ser Leu Met Ser Ser Pro Pro Ala Pro Trp Asp Ser Pro Val Cys Pro Ser Ser Ser Pro Thr Thr Pro Arg Phe Gln Arg Glu Ser Ala Ser His Thr Pro Glu Ser Pro Thr Asp Ser Gln Thr Ser Arg Arg Ser Ser Leu Val Ser Leu Arg Ser Leu Pro Ser Ala His Arg Asp Ser Cys Val Ser Phe

Ser Tyr Ser Arg Asn Phe Ser Arg Phe Gln Leu Asp Ser Val Pro Gly

		115					120					125			
Thr	His	Asp	Thr	Pro	Pro	Asn	Ser	Arg	He	Ser	Leu	Thr	Tyr	Ser	Pro
	130					135					140				
Val	Ser	Leu	Met	Phe	Ser	Pro	Pro	Ala	Leu	Arg	Asp	Ser	Ser	Val	Ser
145					150					155					160
Leu	Ser	Tyr	Ser	Pro	Ala	He	Ser	Thr	Ser	His	Leu	G1y	Ser	Ala	Ser
				165					170					175	
His	Thr	Gln	Glu	Ser	Pro	Thr	Asn	Ser	Arg	Thr	Leu	Leu	Gln	Pro	Ser
			180					185					190		
Pro	Ile	Ser	Phe	Thr	Ser	Ser	Pro	Pro	Ala	Phe	Arg	Asp	Ser	Pro	Val
		195					200					205			
Ser	Pro	Ser	Phe	Ser	Pro	Ala	Phe	Pro	Arg	Phe	Leu	Pro	Gln	Ser	Ala
	210					215					220				
Pro	Gly	Thr	Gln	Gly	Tyr	Pro	Gly	His	Ser	Gln	Ala	Ser	Arg	Asp	Tyr
225					230					235					240
Phe	Pro	Met	Thr	Cys	He	Tyr	Arg	Gly	Met	Ala	Pro	lle	Leu	Pro	Ser
				245					250					255	
Val	Thr	Ser	Asn	Pro	Ser	Pro	Leu	Thr	Leu	Arg	His	Ser	Gln	Gly	Leu
			260					265					270		
Thr	Λla	Thr	Pro	Arg	Tyr	Cys	Pro	Ser	Ala	Arg	Ser	Pro	Gly	Pro	Ser
		275					280					285			
Thr	Ser	Gln	His	Asp	Ala	Ala	Thr	Trp	Pro	Cys	Leu	His	He	Ser	Gly
	290					295					300				
Glu	Gly	Pro	Thr	Pro	Ser	Arg	Arg	Arg	Ala	Pro	Pro	Ala	Phe	Arg	Pro
305					310					315					320
His	Thr	Gln	Ala	-	Pro	Ser	Thr	Cys	-		His	Pro	Leu		
				325					330					335	
Arg	Arg	Gly	Pro	Cys	Asn	G1 y	Arg	Tyr	His	Arg	Pro	Val	Tyr	Pro	His
			340					345					350		
Pro	Thr		Va]	Gln	Arg	Asp		Pro	Ala	G1 y	Pro		G1 y	Cys	His
		355					360					365			
Ser		Cys	Trp	His	Asp		Pro	Ala	Cys	Arg		Pro	Cys	Gly	Pro
	370					375					380				
Arg	Tyr	Arg													

<210> 3433 <211> 100 <212> PRT <213> Homo sapiens <400> 3433 Met Pro Gly Glu Pro Pro Leu Gly Lys Met Phe Gly Arg Gly Ser Lys 1 5 10 15 Gly Ser Thr Glu Asp Gly Leu Glu Leu Arg Gly Ile His Phe Met Val 25 Lys Lys Pro Phe Leu Lys Glu Ser Ser Thr Gln Glu Thr Pro Pro Thr 45 His Ala Ser Leu Pro Pro Lys Thr Arg Leu Cys Leu Ser His Thr Phe 55 60 Tyr Val Leu Tyr Ile Lys Asn Pro Leu Glu Phe Ser Lys Leu Gly Ile 70 75 Val Val Cys Asp Ala Tyr Leu Lys Arg Gly Glu Arg Val Gly His Gly 85 90 95 Gly Ser Arg Leu 100 <210> 3434 <211> 102 <212> PRT <213> Homo sapiens <400> 3434 Met Gln Ala Leu Ser Lys Leu Gly Ser Leu Ser Gln Leu Asp Trp Gly Pro Arg Pro Gly Ser Gly Ala Ala Gly Ala Trp Ala Trp Gly Leu Ala 20 25 30

Val Ala His Gly Leu Ser Ser Gly Leu Gly Trp Arg Arg Cys Ser Leu

45

40

Ala Ala Cys Ala Val Leu Glu Leu Thr Trp Gly Lys Ala Gly Leu Ala
50
Gly Leu Gly Arg Ala Arg Leu Trp Pro Arg Pro Leu Gly Arg Leu Arg
65
Arg Glu Gln Arg Leu Ser Pro Gly Ala Leu Arg Cys Ile Cys Ala Arg
85
Ser Val Ala Arg Cys Leu
100

<210> 3435

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3435

Met Ser Ser Gln Cys Leu Glu Thr Arg Thr Val 11e Tyr Arg Ser I1e

1 5 10 15

Phe Leu Val Phe Leu Lys Val Ser Phe His Asn Thr Arg Ser Ser Leu 20 25 30

Pro Leu Val Ser Trp Arg Val His Pro Thr Asp Glu Ser Ser Phe Pro 35 40 45

Val Gly Leu Ser His Leu Gly Asn Ser Leu Arg Ser Thr Tyr Gln Pro 50 55 60

Arg Lys Leu Pro Gly Tyr Leu Leu Pro Thr Cys Pro Gly Leu lle
65 70 75 80

Asn Thr Lys Gly Gly Lys Leu Lys Gly Ala Ala Asn Trp Ser Thr Trp 85 90 95

Lys Gly Gly Ser Thr Leu Asp Trp Cys Leu Ser Phe Ser Ser Phe Phe 100 105 110

Leu Lys Lys Ile Tyr Phe Leu Asn Asn Asn Lys Cys Thr
115 120 125

<210> 3436

<211> 101

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<212> PRT
<213> Homo sapiens
<400> 3436
Met Asp Gly Gln Thr Glu Arg Ala Ala Asn Gln Gln Ala Ser Ser Ser
                  5
                                     10
Gln Ala Ser His Leu Trp Pro Cys Ile Phe Leu Ser Val Gly Gln Arg
                                 25
Tyr Lys Glu Ile Arg Gln Lys Tyr Arg Arg Trp Ser Phe Ala Leu Ser
         35
                             40
                                                  45
Pro Arg Leu Glu Gly Asn Asp Thr Thr Ile Ala His Trp Ser Leu Glu
                         55
Leu Leu Gly Ser His Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Gly
65
                     70
Thr Thr Ala Thr His His Cys Gly Gly Leu Thr Gly Gly Val Arg Thr
                 85
                                     90
Glu Val Asn Ser Leu
            100
<210> 3437
<211> 101
<212> PRT
<213> Homo sapiens
<400> 3437
Met Thr Pro Pro Pro Lys Thr His Thr His Thr Val Val Ser Tyr His
                                     10
Ser Arg Trp Ala Met Cys Lys Asp Ser Arg Asp Gln Glu Cys Arg Trp
             20
                                 25
                                                      30
Pro Gln Gln Gly Trp Leu Ser Phe Pro Cys Ser Phe Thr Ser Gly Thr
Ser Ala Gly Lys Gly Leu Ser Ser Trp Asn His Ala Pro Val Ile Gly
    50
                         55
Ala Ala Ile Thr Trp Gln Leu Gly Leu Ser Ala Gly Met His Thr Gly
```

65

70

75

Ala Leu Leu Cys Gly Val Ala Ser Ser Ala Cys Leu Asp Phe Phe Tyr Gly Gly Pro Glu Ile <210> 3438 <211> 253 <212> PRT <213> Homo sapiens <400> 3438 Met Leu Ile Leu Gly Ser Met Phe Ser Leu Val Glu Pro Val Leu Thr lle Ala Ala Ala Leu Ser Val Gln Ser Pro Phe Thr Arg Ser Ala Gln Ser Ser Pro Glu Cys Ala Ala Ala Arg Arg Pro Leu Glu Ser Asp Gln Gly Asp Pro Phe Thr Leu Phe Asn Val Phe Asn Ala Trp Val Gln Val Lys Ser Glu Arg Ser Arg Asn Ser Arg Lys Trp Cys Arg Arg Arg Gly Ile Glu Glu His Arg Leu Tyr Glu Met Ala Asn Leu Arg Arg Gln Phe Lys Glu Leu Leu Glu Asp His Gly Leu Leu Ala Gly Ala Gln Ala Ala Gln Val Gly Asp Ser Tyr Ser Arg Leu Gln Gln Arg Arg Glu Arg Arg Ala Leu His Gln Leu Arg Arg Gln His Glu Glu Gly Ala Gly Arg Arg Arg Lys Val Leu Arg Leu Gln Glu Glu Gln Asp Gly Gly Ser Ser Asp Glu Asp Arg Ala Gly Pro Ala Pro Pro Gly Ala Ser Asp Gly Val Asp

lle Gln Asp Val Lys Phe Lys Leu Arg His Asp Leu Ala Gln Leu Gln

Ala Ala Ser Ser Ala Gln Asp Leu Ser Arg Glu Gln Leu Ala Leu 195 200 205 Leu Lys Leu Val Leu Gly Arg Gly Leu Tyr Pro Gln Leu Ala Val Pro 210 215 220 Asp Ala Phe Asn Ser Ser Arg Lys Asp Ser Asp Gln Val Gly Pro Val 225 230 235 240 Leu Pro His Pro Met Phe Cys Pro Pro Thr His Glu Pro 245 250

<210> 3439

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3439

Met Ala Gln Pro Pro Val Thr Leu Leu Cys Ile Cys Ser Glu Val Leu

1 5 10 15

Val Arg Ala Ala Asp Ser Ile Trp Lys Trp Thr Leu Ser Gly Pro Gly
20 25 30

Pro Gly Ser Val Trp Pro Ser Thr Gly Glu Ala Gly Leu Arg Arg Gly
35 40 45

Leu Arg Ala Glu Ala Pro Leu Gln Gln Leu Gln Glu Gly Pro Ala Pro 50 55 60

Gly Glu Glu Cys Leu Gly Arg Ala Trp Gly Leu Arg Val Arg Arg Arg 65 70 75 80

Gly Pro Leu Pro Pro Leu Pro Trp Gly Ser Glu Arg Pro Pro Cys Cys
85 90 95

Leu Glu Gly Ala Trp Gln Leu Glu Trp Glu Gln Arg Pro Gln Gly Gly
100 105 110

Arg Ala Gly Gly Arg Gly Pro Ala Ala Cys Pro Val Pro Arg Lys Val 115 120 125

Thr Ala Cys Phe Glu Ser Ala Ala Lys Lys Ser Val Gly Gln Phe Arg 130 135 140

Gln Leu Ser Pro Glu Leu Pro Arg Glu Thr His Pro Ala Cys Pro Ala 145 150 155 160 Leu Pro Thr Gly Ser Arg Arg Thr Glu Gly Thr Gln Leu Gly Ala Arg

165

Arg Pro Gly Leu

180

<210> 3440 <211> 126 <212> PRT

<213> Homo sapiens

<400> 3440

Met Pro Ser Phe Thr His Ser Pro Pro Glu His Ser Val Ser Pro Met

1 5 10 15

Val Arg Ala Arg Leu Leu Arg Met Ala Phe Lys Ala Ser Val Pro Ser 20 25 30

Pro Arg Pro Ala Ile Leu Gln Arg Val Arg Ser Ala Ser Pro Gly Pro
35 40 45

Leu Pro Val Leu Leu Cys Glu Ala Pro Cys Pro His Leu Phe Thr Cys
50 55 60

Gln Pro Leu His Phe Leu Arg Val Leu Thr Leu Val Ser Trp Leu Pro 65 70 75 80

Phe Tyr Phe Lys Glu Pro Pro Val Tyr Leu Pro Pro Ser Val Ser Leu 85 90 95

lle Leu Leu Ala Leu Ser Phe Phe Cys lle lle Tyr Tyr Leu lle Thr 100 105 110

Tyr Lys Lys Met Tyr Thr Leu Met Cys Thr Val Ser Asn Cys
115 120 125

<210> 3441

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3441

Met Pro Val Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Leu 1 5 10 Glu Leu Arg Ser Ser Gly Pro Ala Leu Asp Lys Met Val Arg Pro Cys 20 25 30 Leu Cys Gln Lys Asn Thr Glu Val Ser Gln Ala Trp Cys Ser Val Pro 40 Val Val Ala Ala Thr Gly Glu Ala Glu Val Gly Gly Ser Leu Asp Pro 50 55 Arg Arg Ser Gly Leu Gln Trp Ala Val Ile Val Pro Leu His Pro Ser 70 75 Leu Gly Asp Arg Val Arg Pro Cys Leu Lys Lys Arg Lys Val Lys Ala 85 90 Thr Arg Gly Gly Ser Cys Leu Trp Phe Gln His Phe Gly Arg Pro Arg 100 105 110 Arg Val Asp His Leu Arg Trp Gly Val 115 120

<210> 3442

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3442

Met Arg Pro Lys Pro Pro Ser Arg Ala Gly Val Leu Gln 11e Ala Gln
1 5 10 15

Glu Leu His Arg Lys Ala Glu Gln Thr Pro Pro Arg Pro Arg Pro Arg 20 25 30

Ser Leu Thr Val Ala Arg Gly Ser Val Gly His Thr Glu Glu Arg Gly
35 40 45

Gly Val Ala Ala Glu Leu Arg Lys Arg Leu Val Arg Gly Gly Ala Arg
50 55 60

Arg Gly Ser Arg Asp Gly Gly Arg Gly Arg Gly Gly Gly Val Ala
65 70 75 80

Gly Gln Arg Ser Gln Glu Gly Trp Gly Ser Gly Arg Arg Ala Arg Val 85 90 95

Thr	Gly	Arg	Gly	Ser	Trp	G1 y	Arg	Gly	Pro	Gly	Val	Ala	Ala	Arg	Gly
			100					105					110		
Val	Gly	Ala	Ala	Gly	Arg	Asp	Thr	Gly	Gly	Pro	Arg	Ala	Leu	Gly	Gly
		115					120					125			
Gly	Cys	Lys	Ala	Trp	Ile	Thr	Leu	Met	Ser	Gly	Glu	Thr	Cys	Thr	Gly
	130					135					140				
Gly	Thr	lle	Leu	Ser	Pro	Thr	Ser	Ala	Pro	Glu	Ala	Gln	Pro	Ala	Asp
145					150					155					160
Gly	Ala	Gly	Cys	Arg	Thr	Ser	Gln	Gln	Ser	Leu	Gly	Gly	Lys	Gly	Gly
				165					170					175	
Ala	Gly	Arg	Thr	His	Ala	Pro	Ser	Ala	Ala	Arg	Glu	Arg	Gly	Ala	Ala
			180					185					190		
Pro	Pro	Gly	Asp	Arg	Arg	Val	Thr	Ala	Arg	Pro	Arg	Ala	Ala	Val	Thr
		195					200					205			
Ser	Arg	Glu	Ala	His	Ala	His	Lys	Gly	Trp	Gly	Val	Arg	Gly	Gly	Ser
	210					215					220				
Ser	Ala	Ala	Pro	Ala	Gln	Leu	Leu	Arg	Glu	Ala	Gly	Ser	Ala	Pro	Ser
225					230					235					240
Gly	Arg	Gly	Val	Ser	Phe	Pro	Arg	Arg	Ala	Gly	Gly	Pro	Leu	Phe	Pro
				245					250					255	
Arg	Ala	Ala	Ala	Glu	Ala	Pro	Pro	Ser	Ala	Ser	Trp	Pro	Cys	Val	His
			260					265					270		
Thr	Pro	Asp	Cys	Gly	Pro	G1 y	Arg	Thr	Leu	Ser	Ser	Cys	Ala	Glu	Arg
		275					280					285			
Arg	Arg	Pro	Glu	Val	Arg	Ala	Ala	Arg	Ala	Gly	Pro	Ala	Pro	Arg	Thr
	290					295					300				
Ala	Pro	Thr	Arg	Gly	Trp	Pro	Gly	Gln	Gly		Gly	Gly	Pro	G1 y	
305					310					315					320
61v	Val														

<210> 3443

<211> 267

<212> PRT

<213> Homo sapiens

<400)> 34	143													
Met	Lys	Ala	Glu	Ala	Thr	Val	He	Pro	Ser	Arg	Cys	Ala	Arg	Gly	Leu
1				5					10					15	
Pro	Ser	Trp	Gln	Val	Leu	Ser	Pro	Val	Gln	Pro	Trp	Gln	Thr	Ser	Ala
			20					25					30		
Pro	Gln	Asn	Thr	Thr	Gln	Pro	Lys	Leu	Leu	Ala	Pro	His	Gln	His	Asp
		35					40					45			
Lys	Ser	Gln	Lys	Lys	Ser	Ser	Leu	Leu	Lys	Glu	Leu	Gly	Ala	Phe	His
	50					55					60				
He	Thr	lle	Ala	Leu	Leu	His	Leu	Val	Phe	Gly	Gly	Tyr	Leu	Ala	Ser
65					70					75					80
Пe	Val	Lys	Asn	Leu	His	Leu	Val	Val	Leu	Lys	Ser	Trp	Tyr	Pro	Phe
				85					90					95	
Trp	Gly	Ala	Ala	Ser	Phe	Leu	Ile	Ser	Gly	Пe	Leu	Ala	Ile	Thr	Met
			100					105					110		
Lys	Thr	Phe	Ser	Lys	Thr	Tyr	Leu	Lys	Met	Leu	Cys	Leu	Met	Thr	Asn
		115					120					125			
Leu	He	Ser	Leu	Phe	Cys		Leu	Ser	Gly	Leu	Phe	Val	lle	Ser	Lys
	130					135					140				
Asp	Leu	Phe	Leu	Glu	Ser	Pro	Phe	Glu	Ser	Pro	He	Trp	Arg	Met	Tyr
145					150					155					160
Pro	Asn	Ser	Thr		His	lle	Gln	Arg		Glu	Leu	Ala	Leu		Cys
				165				_	170					175	
Phe	Thr	Val		Glu	Leu	Phe	Leu-		Va1	Pro	Thr	Ala		Thr	Ala
-		6.7	180			_		185					190		
Trp	Arg		Asp	Cys	Pro	Ser		Lys	Asn	Asp	Asp		Cys	Leu	Val
13		195	15	,			200	61		В	17 1	205	Б	Б	D
Pro		Inr	Pro	Leu	His		Lys	GIV	Leu	Pro		Glu	Pro	Pro	Pro
C	210 T	C1	C .	V 1	11	215	C1	۸	4.1	C1	220		C1	11.	C1
	Tyr	GIN	261.	vai	11e	GIN	GIY	Asp	Ala		nis	Lys	61n	HIS	
225	Lave	A	C1	V = 1	230	C1	V = 1	A 1 -	D	235	Tl	т	11.	V = 1	240
arg	reu	Arg	oru		Lys	GIN	vaı	Ala		Asp	ınr	ırp	116		ınr
Acr	C1v	A 1	Ale	245	Т	۸1،	C1	Th	250	A a ==				255	
nsp	61 y	n1a		116	Trp	ита	GIN		мта	asn					
			260					265							

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<211> 497
<212> PRT
<213> Homo sapiens
<400> 3444
Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Val Val Ile Ile Lys Gly
 1
                  5
                                     10
Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Thr
                                 25
             20
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
         35
                             40
                                                  45
Gly Asp Phe Tyr Met Thr Trp Leu Arg Gln Val Pro Gly Lys Asp Leu
                         55
Glu Trp Leu Ala Tyr Ile Ser Ser Asn Gly Gly Tyr Ser Glu Tyr Ala
                     70
                                         75
Asp Ser Val Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Val Lys Asn
                                     90
Ser Leu His Leu Gln Met Asn Ser Leu Arg Ala Gln Asp Thr Ala Ile
            100
                                105
                                                     110
Tyr Tyr Cys Ala Arg Phe Thr Val Ser Met Asp Thr Val Ala Tyr Ser
        115
                            120
                                                 125
Tyr Gly Leu Asp Val Trp Gly Pro Gly Thr Ala Val Thr Val Ser Ser
                        135
Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr
                    150
                                        155
Gln Pro Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe
                                    170
                165
Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val
            180
                                185
Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr
        195
                            200
                                                 205
Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly
    210
                        215
                                             220
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<210> 3444

Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro	Ser	Gln	Asp
225					230					235					240
Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro
				245					250					255	
Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser	Cys	Cys	His	Pro	Arg	Leu	Ser
			260					265					270		
Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu	Leu	Gly	Ser	Glu	Ala	Asn
		275					280					285			
Leu	Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp	Ala	Ser	Gly	Val	Thr	Phe
	290					295					300				
Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala	Val	Gln	Gly	Pro	Pro	Glu
305					310					315					320
Arg	Asp	Leu	Cys	G]y	Cys	Tyr	Ser	Val	Ser	Ser	Val	Leu	Pro	Gly	Cys
				325					330					335	
Ala	Glu	Pro	Trp	Asn	His	Gly	Lys	Thr	Phe	Thr	Cys	Thr	Ala	Ala	Tyr
			340					345					350		
Pro	Glu	Ser	Lys	Thr	Pro	Leu	Thr	Ala	Thr	Leu	Ser	Lys	Ser	Gly	Asn
		355					360					365			
Thr	Phe	Arg	Pro	Glu	Val	His	Leu	Leu	Pro	Pro	Pro	Ser	Glu	Glu	Leu
	370					375					380				
Ala	Leu	Asn	Glu	Leu	Val	Thr	Leu	Thr	Cys	Leu	Ala	Arg	Gly	Phe	Ser
385					390					395					400
Pro	Lys	Asp	Val	Leu	Val	Arg	Trp	Leu	Gln	G1y	Ser	Gln	Glu	Leu	Pro
				405					410					415	
Arg	Glu	Lys	Tyr	Leu	Thr	Trp	Ala	Ser	Trp	Gln	Glu	Pro	Ser	Gln	Gly
			420					425					430		
Thr	Thr	Thr	Phe	Ala	Va]	Thr	Ser	He	Leu	Arg	Val	Ala	Ala	Glu	Asp
		435					440					445			
Trp	Lys	Lys	Gly	Asp	Thr	Phe	Ser	Cys	Met	Val	Gly	His	Glu	Ala	Leu
	450					455					460				
Pro	Leu	Ala	Phe	Thr	Gln	Lys	Thr	11e	Asp	Arg	Leu	Ala	Gly	Lys	Pro
465					470					475					480
Thr	His	Va]	Asn	Val	Ser	Val	Va]	Met	Ala	Glu	Val	Asp	Gly	Thr	Cys
				485					490					495	
Tyr															

<210> 3445 <211> 101 <212> PRT <213> Homo sapiens <400> 3445 Met Ala Gly Leu Ala Arg Arg Val Val Gly Ala Phe Leu Leu Phe His 5 10 1 Phe Lys Gln Lys Ser Gly Ala Glu Thr Gly Glu Ala Ala Leu His Leu 25 Gly Arg Ser Pro Val Leu Pro Ala Arg Ala Gly 11e Leu Arg Thr Cys 35 40 45 Leu Ser Leu Arg Ala Val Thr Ser Pro Gln Asp Phe Gly Ser Ala Gln 50 55 60 Arg Thr Arg Ser Ala Pro Leu Gly Pro lle Asn Gln Ala Ser Arg Arg 70 75 80 Val Gln Pro Gly Lys Ala Asn Pro Glu Arg Arg Ala Asn Asp Ser Asp 95 85 90 Ser Gln Gly Lys Ala 100 ⟨210⟩ 3446 <211> 175 <212> PRT <213> Homo sapiens <400> 3446 Met His Gly Glu Lys Ser His Gly Arg Gly Gln Ala Gly Arg Gln Val 10 Pro Leu Lys Gln Gln Ser Val Ser Gly Glu Ser Gln Gln Gly Ala Arg 20 25 30

Gln Gly Ala Gly Gln Ser Thr Cys Tyr Leu Ser Ser Ala Phe Leu Cys

45

40

Asn Gly Ser Phe Pro Ala Gly Ser Met Ser Leu Trp Asp Pro Gln Pro Lys Gln Ala Phe Pro Ser Val Leu Trp Cys Ser Trp Ala Gly Val Pro Gly Arg Arg Thr Gly Gln Arg Asp Pro Arg Val Gln Glu Arg Arg Gly Asp Phe Val Ser Lys Leu Gly Ala Ala Val Gly Gly Glu Pro Leu Ala Leu Phe Gly Pro His Ser Trp Pro Gly Met Gly His Arg Val Pro Gly Leu Gly Ala Gly Phe Leu Leu Phe Ala Gly Phe Ala Leu Glu Pro Trp Asp Ser Tyr His Val Val Phe Glu Gly Trp Thr lle Asp Met Arg Arg Asn Glu Pro Glu Arg Thr Arg Ser Leu Ser Ala Pro Gly Pro Leu

<210> 3447

<211> 487

<212> PRT

<213> Homo sapiens

<400> 3447

Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala lle Leu Glu Gly Val His Cys Glu Ala Gln Val Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe Ser Ser Phe Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala Ser lle Asn Lys Asp Gly Arg Asp Ser Tyr Tyr Val Glu Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Thr

Ser	Leu	Tyr	Leu	Gln	Met	Gly	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val
			100					105					110		
Tyr	Tyr	Cys	Ala	Arg	Lys	Phe	Met	Phe	Asp	Ser	Trp	Ser	Ser	Tyr	Tyr
		115					120					125			
Val	Glu	Gly	His	Tyr	Phe	Asp	Leu	Trp	Gly	Arg	Gly	Thr	Gln	Val	Thr
	130					135					140				
Val	Ser	Ser	Ala	Ser	Pro	Thr	Ser	Pro	Lys	Val	Phe	Pro	Leu	Ser	Leu
145					150					155					160
Asp	Ser	Thr	Pro	Gln	Asp	G1 y	Asn	Val	Val	Val	Ala	Cys	Leu	Val	Gln
				165					170					175	
Gly	Phe	Phe	Pro	Gln	Glu	Pro	Leu	Ser	Val	Thr	Trp	Ser	Glu	Ser	Gly
			180					185					190		
Gln	Asn	Val	Thr	Ala	Arg	Asn	Phe	Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly
		195					200					205			
Asp	Leu	Tyr	Thr	Thr	Ser	Ser	Gln	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys
	210					215					220				
Pro	Asp	Gly	Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro
225					230					235					240
Ser	Gln	Asp	Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Pro	Pro	Pro	Pro	Cys
				245					250					255	
Cys	His	Pro	Arg	Leu	Ser	Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu
			260					265					270		
Leu	Gly	Ser	Glu	Ala	Asn	Leu	Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp
		275					280					285			
Ala	Ser	Gly	Ala	Thr	Phe	Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala
	290					295					300				
Val	Gln	Gly	Pro	Pro	Glu	Arg	Asp	Leu	Cys	Gly	Cys	Tyr	Ser	Val	Ser
305					310					315					320
Ser	Val	Leu	Pro	Gly	Cys	Ala	Gln	Pro	Trp	Asn	His	Gly	G]u	Thr	Phe
				325					330					335	
Thr	Cys	Thr	Ala	Ala	His	Pro	Glu	Leu	Lys	Thr	Pro	Leu	Thr	Ala	Asn
			340					345					350		
lle	Thr	Lys	Ser	Gly	Asn	Thr	Phe	Arg	Pro	Glu	Val	His	Leu	Leu	Pro
		355					360					365			
Pro	Pro	Ser	Glu	Glu	Leu	Ala	Leu	Asn	Glu	Leu	Val	Thr	Leu	Thr	Cys
	370					375					380				

Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr

<210> 3448

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3448

Met Ala Ser Phe Pro Leu Leu Leu Thr Leu Leu Thr His Cys Ala Gly Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Thr Val Thr 11e Ser Cys Ser Gly Ala Ser Ser Asn 11e Gly Arg Asn Ser Val Asn Trp Phe Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Asn His Asn Asn Asn Gln Arg Pro Ala Gly Val Pro Asp

Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser 85 90 95

Gly Leu His Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp 100 105 110 Asn Ser Leu Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val 120 Leu Gly Glu Ser Leu Leu Pro Ser Pro Ser Pro Leu Leu Gly Gln Phe 130 135 140 Leu Leu Phe Leu Phe Val Ser Leu Cys Cys Leu Lys Leu Trp Ser Asp 145 150 155 160 Phe Leu Pro Thr Ser Gln Ala 165

<210> 3449

<211> 425

<212> PRT

<213> Homo sapiens

<400> 3449

130

145

Met Val Pro Glu Gly Leu Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr 10 Pro Arg Gln Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp Phe 20 25 30 Lys Ala Val Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr Asn His Gln Ser Arg Glu Val Glu Met Ser Thr Arg Gly Arg Phe Gln Leu Thr 50 55 60 Gly Asp Pro Ala Lys Gly Asn Cys Ser Leu Val Ile Arg Asp Ala Gln 70 75 Met Gln Asp Glu Ser Gln Tyr Phe Phe Arg Val Glu Arg Gly Ser Tyr 90 Val Arg Tyr Asn Phe Met Asn Asp Gly Phe Phe Leu Lys Val Thr Val 100 105 \ 110 Leu Ser Phe Thr Pro Arg Pro Gln Asp His Asn Thr Asp Leu Thr Cys 120 His Val Asp Phe Ser Arg Lys Gly Val Ser Val Gln Arg Thr Val Arg

135

150

Leu Arg Val Ala Tyr Ala Pro Arg Asp Leu Val 11e Ser 11e Ser Arg

140

160

Asp	Asn	Thr	Pro	Asp	Pro	Pro	Glu	Asn	Leu	Arg	Val	Met	Val	Ser	Gln
				165					170					175	
Ala	Asn	Arg	Thr	Val	Leu	Glu	Asn	Leu	Gly	Asn	Gly	Thr	Ser	Leu	Pro
			180					185					190		
Val	Leu	Glu	Gly	Gln	Ser	Leu	Cys	Leu	Val	Cys	Val	Thr	His	Ser	Ser
		195					200					205			
Pro	Pro	Ala	Arg	Leu	Ser	Trp	Thr	Gln	Arg	Gly	Gln	Val	Leu	Ser	Pro
	210					215					220				
Ser	Gln	Pro	Ser	Asp	Pro	Gly	Val	Leu	Glu	Leu	Pro	Arg	Val	Gln	Val
225					230					235					240
Glu	His	Glu	Gly	Glu	Phe	Thr	Cys	His	Ala	Arg	His	Pro	Leu	Gly	Ser
				245					.250					255	
Gln	His	Val	Ser	Leu	Ser	Leu	Ser	Val	His	Tyr	Lys	Lys	G1 y	Leu	He
			260					265					270		
Ser	Thr	Ala	Phe	Ser	Asn	Gly	Ala	Phe	Leu	Gly	lle	Gly	He	Thr	Ala
		275					280					285			
Leu	Leu	Phe	Leu	Cys	Leu	Ala	Leu	Ile	He	Met	Lys	He	Leu	Pro	Lys
	290					295					300				
	290			Thr	Glu	295	Pro					Ser	Arg	His	Ser
	290			Thr		295	Pro					Ser	Arg	His	Ser 320
Arg 305	290 Arg	Thr	Gln		Glu	295 Thr		Arg	Pro	Arg 315	Phe				320
Arg 305	290 Arg	Thr	Gln		Glu 310	295 Thr		Arg	Pro	Arg 315	Phe				320
Arg 305 Thr	290 Arg 11e	Thr Leu	Gln Asp	Tyr 325	Glu 310	295 Thr Asn	Val	Arg Val	Pro Pro 330	Arg 315 Thr	Phe Ala	Gly	Pro	Leu 335	320 Val
Arg 305 Thr	290 Arg 11e	Thr Leu	Gln Asp	Tyr 325	Glu 310 Ile	295 Thr Asn	Val	Arg Val	Pro Pro 330	Arg 315 Thr	Phe Ala	Gly	Pro	Leu 335	320 Val
Arg 305 Thr Gln	290 Arg 11e Lys	Thr Leu Arg	Gln Asp Asn 340	Tyr 325 Gln	Glu 310 Ile	295 Thr Asn Ala	Val Thr	Arg Val Pro 345	Pro Pro 330 Ser	Arg 315 Thr Ser	Phe Ala Pro	Gly Arg	Pro Thr 350	Leu 335 Pro	320 Val Leu
Arg 305 Thr Gln	290 Arg 11e Lys	Thr Leu Arg	Gln Asp Asn 340	Tyr 325 Gln	Glu 310 Ile Lys	295 Thr Asn Ala	Val Thr	Arg Val Pro 345	Pro Pro 330 Ser	Arg 315 Thr Ser	Phe Ala Pro	Gly Arg	Pro Thr 350	Leu 335 Pro	320 Val Leu
Arg 305 Thr Gln Pro	290 Arg 11e Lys Pro	Thr Leu Arg Gly 355	G1n Asp Asn 340 A1a	Tyr 325 Gln Pro	Glu 310 Ile Lys	295 Thr Asn Ala Pro	Val Thr Glu 360	Arg Val Pro 345 Ser	Pro Pro 330 Ser Lys	Arg 315 Thr Ser Lys	Phe Ala Pro Asn	Gly Arg Gln 365	Pro Thr 350 Lys	Leu 335 Pro Lys	320 Val Leu Gln
Arg 305 Thr Gln Pro	290 Arg 11e Lys Pro	Thr Leu Arg Gly 355	G1n Asp Asn 340 A1a	Tyr 325 Gln Pro	Glu 310 Ile Lys Ser	295 Thr Asn Ala Pro	Val Thr Glu 360	Arg Val Pro 345 Ser	Pro Pro 330 Ser Lys	Arg 315 Thr Ser Lys	Phe Ala Pro Asn	Gly Arg Gln 365	Pro Thr 350 Lys	Leu 335 Pro Lys	320 Val Leu Gln
Arg 305 Thr Gln Pro	290 Arg 11e Lys Pro Gln 370	Thr Leu Arg Gly 355 Leu	Gln Asp Asn 340 Ala Pro	Tyr 325 Gln Pro Ser	Glu 310 Ile Lys Ser	295 Thr Asn Ala Pro Pro 375	Val Thr Glu 360 Glu	Arg Val Pro 345 Ser	Pro Pro 330 Ser Lys	Arg 315 Thr Ser Lys	Phe Ala Pro Asn Ser 380	Gly Arg Gln 365 Thr	Pro Thr 350 Lys Gln	Leu 335 Pro Lys Ala	320 Val Leu Gln Pro
Arg 305 Thr Gln Pro	290 Arg 11e Lys Pro Gln 370	Thr Leu Arg Gly 355 Leu	Gln Asp Asn 340 Ala Pro	Tyr 325 Gln Pro Ser	Glu 310 Ile Lys Ser	295 Thr Asn Ala Pro Pro 375	Val Thr Glu 360 Glu	Arg Val Pro 345 Ser	Pro Pro 330 Ser Lys	Arg 315 Thr Ser Lys	Phe Ala Pro Asn Ser 380	Gly Arg Gln 365 Thr	Pro Thr 350 Lys Gln	Leu 335 Pro Lys Ala	320 Val Leu Gln Pro
Arg 305 Thr Gln Pro Tyr Glu 385	290 Arg 11e Lys Pro G1n 370 Ser	Thr Leu Arg Gly 355 Leu Gln	Gln Asp Asn 340 Ala Pro Glu	Tyr 325 Gln Pro Ser	Glu 310 Ile Lys Ser Phe	295 Thr Asn Ala Pro Pro 375 Glu	Val Thr Glu 360 Glu Glu	Arg Val Pro 345 Ser Pro	Pro Pro 330 Ser Lys Lys	Arg 315 Thr Ser Lys Ser Tyr 395	Phe Ala Pro Asn Ser 380 Ala	Gly Arg Gln 365 Thr	Pro Thr 350 Lys Gln Leu	Leu 335 Pro Lys Ala Asn	320 Val Leu Gln Pro
Arg 305 Thr Gln Pro Tyr Glu 385	290 Arg 11e Lys Pro G1n 370 Ser	Thr Leu Arg Gly 355 Leu Gln	Gln Asp Asn 340 Ala Pro Glu	Tyr 325 Gln Pro Ser	Glu 310 Ile Lys Ser Phe Gln 390	295 Thr Asn Ala Pro Pro 375 Glu	Val Thr Glu 360 Glu Glu	Arg Val Pro 345 Ser Pro	Pro Pro 330 Ser Lys Lys	Arg 315 Thr Ser Lys Ser Tyr 395	Phe Ala Pro Asn Ser 380 Ala	Gly Arg Gln 365 Thr	Pro Thr 350 Lys Gln Leu	Leu 335 Pro Lys Ala Asn	320 Val Leu Gln Pro
Arg 305 Thr Gln Pro Glu 385 Pro	290 Arg 11e Lys Pro Gln 370 Ser Gly	Thr Leu Arg Gly 355 Leu Gln Val	Gln Asp Asn 340 Ala Pro Glu Arg	Tyr 325 Gln Pro Ser Ser Pro 405	Glu 310 Ile Lys Ser Phe Gln 390	295 Thr Asn Ala Pro 9ro 375 Glu	Val Thr Glu 360 Glu Glu Glu	Arg Val Pro 345 Ser Pro Leu Ala	Pro 330 Ser Lys Lys Arg	Arg 315 Thr Ser Lys Ser Tyr 395	Phe Ala Pro Asn Ser 380 Ala	Gly Arg Gln 365 Thr	Pro Thr 350 Lys Gln Leu	Leu 335 Pro Lys Ala Asn	320 Val Leu Gln Pro

<210> 3450

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<211> 153
<212> PRT
<213> Homo sapiens
<400> 3450
Met Val Thr Leu Arg Ser Lys Leu Gly Pro Leu Glu Ile Gln Gln Phe
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Ala Met Leu Leu Arg Glu Tyr Arg Leu Gly Leu Pro Ile Gln Asp Tyr
                                 25
             20
Cys Thr Gly Leu Leu Lys Leu Tyr Gly Asp Arg Arg Lys Phe Leu Leu
                             40
Leu Gly Met Arg Pro Phe Ile Pro Asp Gln Asp Ile Gly Tyr Phe Glu
     50
                         55
Gly Phe Leu Glu Gly Val Gly Ile Arg Glu Gly Gly Ile Leu Thr Asp
                     70
                                         75
Ser Phe Gly Arg Ile Lys Arg Ser Met Ser Ser Thr Ser Ala Ser Ala
                                     90
                 85
Val Arg Ser Tyr Asp Gly Ala Ala Gln Arg Pro Glu Ala Gln Ala Phe
            100
                                105
                                                     110
His Arg Leu Leu Ala Asp Ile Thr His Asp Ile Glu Ala Leu Ala Pro
                           120
Asp Asp Asp Asp Asp Glu Asp Glu Pro Arg Gly Ser Arg Gly Gly
    130
                        135
                                            140
Ser Asp Ala Ala Glu Asp Asn Tyr Leu
145
                    150
<210> 3451
<211> 436
<212> PRT
<213> Homo sapiens
<400> 3451
Met Arg Arg Asp Val Asn Gly Val Thr Lys Ser Arg Phe Glu Met Phe
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Ser	Asn	Ser	Asp	Glu	Ala	Val	He	Asn	Lys	Lys	Leu	Pro	Lys	Glu	Leu
			20					25					30		
Leu	Leu	Arg	He	Phe	Ser	Phe	Leu	Asp	Val	Va]	Thr	Leu	Cys	Arg	Cys
		35					40					45			
Ala	Gln	Val	Ser	Arg	Лlа	Trp	Asn	Val	Leu	Ala	Leu	Asp	Gly	Ser	Asn
	50					55					60				
Trp	Gln	Arg	lle	Asp	Leu	Phe	Asp	Phe	Gln	Arg	Asp	lle	Glu	Gly	Arg
65					70					75					80
Val	Val	Glu	Asn	He	Ser	Lys	Arg	Cys	Gly	Gly	Phe	Leu	Arg	Lys	Leu
				85					90					95	
Ser	Leu	Arg	Gly	Cys	Leu	Gly	Val	Gly	Asp	Asn	Ala	Leu	Arg	Thr	Phe
			100					105					110		
Ala	Gln	Asn	Cys	Arg	Asn	Пе	Glu	Val	Leu	Asn	Leu	Asn	Gly	Cys	Thr
		115					120					125			
Lys		Thr	Asp	Ala	Thr	Cys	Thr	Ser	Leu	Ser	Lys	Phe	Cys	Ser	Lys
	130					135					140				
Leu	Arg	His	Leu	Asp	Leu	Ala	Ser	Cys	Thr	Ser	He	Thr	Asn	Met	Ser
145					150					155					160
Leu	Lys	Ala	Leu		Glu	Gly	Cys	Pro		Leu	Glu	Gln	Leu	Asn	He
				165					170	•				175	
Ser	Trp	Cys		Gln	Val	Thr	Lys		Gly	lle	G1n	Ala	Leu	Val	Arg
	_		180					185					190		
G1y	Cys	Gly	Gly	Leu	Lys	Ala		Phe	Leu	Lys	Gly		Thr	G]n	Leu
0.1		195			_	_	200				_	205			
Glu		Glu	Ala	Leu	Lys		He	Gly	Ala	His		Pro	Glu	Leu	Val
T.I	210			0.1	mı	215		0.1		<i>a</i> n	220	0.3		_	
	Leu	Asn	Leu	GIn		Cys	Leu	GIn	He		Asp	Glu	Gly	Leu	
225 TI	7.1	C		C1	230	11.	,		6.1	235		0			240
Ihr	11e	Cys	Arg		Cys	His	Lys	Leu		Ser	Leu	Cys	Ala		Gly
C	C .		1.7	245					250			0.1	0.1	255	0
Cys	ser	Asn		Ihr	Asp	Ala	11e		Asn	Ala	Leu	61 y		Asn	Cys
D	A		260			61	17 1	265		0	<u> </u>	0.1	270	T)	
Pro	Arg	Leu	Arg	116	Leu	GIU		Ala	Arg	Lys	Ser		Leu	Ihr	Asp
V = 1	C1	275	Tt	TL	1	A 3	280	۸.	C-	11.2	C1	285	C1	Α.	
val		Phe	ınr	Inr	Leu		Arg	Asn	Cys	H1S		Leu	Glu	Arg	Met
	290					295					300				

Asp Leu Glu Glu Cys Val Gln Ile Thr Asp Ser Thr Leu Ile Gln Leu 310 Ser Ile His Cys Pro Arg Leu Gln Val Leu Ser Leu Ser His Cys Glu 330 335 Leu lle Thr Asp Asp Gly Ile Arg His Leu Gly Asn Gly Ala Cys Ala 350 340 345 His Asp Gln Leu Glu Val lle Glu Leu Asp Asn Cys Pro Leu lle Thr 360 365 Asp Ala Ser Leu Glu His Leu Lys Ser Cys His Ser Leu Glu Arg Ile 370 375 380 Glu Leu Tyr Asp Cys Gln Gln Ile Thr Arg Ala Gly Ile Lys Arg Leu 390 395 Arg Thr His Leu Pro Asn Ile Lys Val Tyr Ala Tyr Phe Ser Pro Val 405 410 415 Thr Pro Pro Pro Ser Val Gly Gly Ser Arg Gln Arg Phe Cys Arg Cys 420 425 430 Cys Ile Ile Leu 435

<210> 3452

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3452

Met Gly Ala Thr Glu Ala Ala Gly Gly Ala Ala Val Ser Arg Ala Arg 1 5 10 15

Asn Gln Thr Trp Thr Ala Leu Gly Pro Gly Cys Arg Asp Gln Val Thr 20 25 30

Arg Ser Pro Glu Gly Cys Trp Pro Arg Ser Gln Asn Pro Gly Ala Ala 35 40 45

Arg Thr lle Gly Ser Ser Leu Tyr Gly Thr Gly Asp Arg His Pro Ala 50 55 60

Leu Val Pro Cys Ala Val Ala Asp Gly Glu Thr Glu Ala Ser Ser Leu 65 70 75 80

Pro Gly Ile Thr Val Ile Leu Glu Gln Arg Gly Pro Glu Arg Ala Cys
85 90 95

Ser Trp Pro Lys Val Thr Gln
100

<210> 3453

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3453

Met Ala Ser Asp Asp Phe Asp Ile Val Ile Glu Ala Met Leu Glu Ala 1 5 10 15

Pro Tyr Lys Lys Glu Glu Asp Glu Gln Gln Arg Lys Glu Val Lys Lys
20 25 30

Asp Tyr Pro Ser Asn Thr Thr Ser Ser Thr Ser Asn Ser Gly Asn Glu
35 40 45

Thr Ser Gly Ser Ser Thr Ile Gly Glu Thr Ser Lys Lys Lys Arg Ser 50 55 60

Arg Ser His Asn Lys Ser Arg Asp Arg Lys Arg Ser Arg Ser Arg Asp
65 70 75 80

Arg Asp Arg Tyr Arg Arg Asp Ser Arg Ser Arg Ser Pro Gly Arg
85 90 95

Gln Cys Arg His Arg Ser Arg Ser Trp Asp Arg Arg His Gly Ser Glu 100 105 110

Ser Arg Ser Arg Asp His Arg Glu Asp Arg Val His Tyr Arg Ser 115 120 125

Pro Pro Leu Ala Thr Gly Tyr Arg Tyr Gly His Ser Lys Ser Pro His 130 135 140

Phe Arg Glu Lys Ser Pro Val Arg Glu Pro Val Asp Asn Leu Ser Pro 145 150 155 160

Glu Glu Arg Asp Ala Arg Thr Val Phe Cys Met Gln Leu Ala Ala Arg 165 170 175

lle Arg Pro Arg Asp Leu Glu Asp Phe Phe Ser Ala Val Gly Lys Val 180 185 190 Arg Asp Val Cys Ile 11e Ser Asp Arg Asn Ser Arg Arg Ser Lys Gly lle Ala Tyr Val Glu Phe Cys Glu Ile Gln Ser Val Pro Leu Ala Ile Gly Leu Thr Gly Gln Arg Leu Leu Gly Val Pro Ile 1le Val Gln Ala Ser Gln Ala Glu Lys Asn Arg Leu Ala Ala Met Ala Asn Asp Leu Gln Lys Gly Asn Gly Gly Pro Met Arg Leu Tyr Val Gly Ser Leu His Phe Asn Ile Thr Glu Asp Met Leu Arg Gly Ile Phe Glu Pro Phe Gly Lys lle Asp Asn lle Val Leu Met Lys Asp Ser Asp Thr Gly Arg Ser Lys Gly Tyr Gly Phe Ile Thr Leu His Pro Pro Pro Leu Gly Thr Val

<210> 3454

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3454

Met Gly Lys Arg Asp Pro Arg Ala Gln Leu Phe Leu Pro Ser Ala Gly Leu Leu Gln Thr Ser Arg Leu His Cys Arg Leu Arg His Phe Leu Ala Glu Pro Pro Ser Phe Leu Leu Ser Phe Gln Leu Leu Leu His Cys Pro Phe Leu Ser Pro Leu Ser Cys Thr Ser Ala Ser Ile Leu Ala Ser Ser Ser Leu Lys Thr Gln Pro Asp Thr Ile Ser Ile Ile Thr Leu Phe lle Ser Gln Trp Arg Arg Trp Gly Ser Arg Gln Glu Arg Gln Ser Val

Asn Met Leu Pro Leu Lys Phe Cys Thr Ala Leu Ser Leu Leu Gly Leu 100 105 110

Trp Ala Lys Ile Lys Cys Lys Ser Leu Tyr Tyr Ser

115 120

<210> 3455

<211> 375

<212> PRT

<213> Homo sapiens

<400> 3455

Met Glu Asp Ser Glu Ala Leu Gly Phe Glu His Met Gly Leu Asp Pro

1 5 10 15

Arg Leu Leu Gln Ala Val Thr Asp Leu Gly Trp Ser Arg Pro Thr Leu
20 25 30

Ile Gln Glu Lys Ala Ile Pro Leu Ala Leu Glu Gly Lys Asp Leu Leu
35 40 45

Ala Arg Ala Arg Thr Gly Ser Gly Lys Thr Ala Ala Tyr Ala 11e Pro
50 55 60

Met Leu Gln Leu Leu His Arg Lys Ala Thr Gly Pro Val Val Glu
65 70 75 80

Gln Ala Val Arg Gly Leu Val Leu Val Pro Thr Lys Glu Leu Ala Arg 85 90 95

Gln Ala Gln Ser Met Ile Gln Gln Leu Ala Thr Tyr Cys Ala Arg Asp 100 105 110

Val Arg Val Ala Asn Val Ser Ala Ala Glu Asp Ser Val Ser Gln Arg 115 120 125

Ala Val Leu Met Glu Lys Pro Asp Val Val Gly Thr Pro Ser Arg 130 135 140

lle Leu Ser His Leu Gln Gln Asp Ser Leu Lys Leu Arg Asp Ser Leu 145 150 155 160

Głu Leu Leu Val Val Asp Glu Ala Asp Leu Leu Phe Ser Phe Gly Phe 165 170 175

Glu Glu Glu Leu Lys Ser Leu Leu Cys His Leu Pro Arg lle Tyr Gln

			180					185					190		
Ala	Phe	Leu	Met	Ser	Ala	Thr	Phe	Asn	Glu	Asp	Val	Gln	Ala	Leu	Lys
		195					200					205			
Glu	Leu	11e	Leu	His	Asn	Pro	Val	Thr	Leu	Lys	Leu	Gln	Glu	Ser	Gln
	210					215					220				
Leu	Pro	Gly	Pro	Asp	Gln	Leu	Gln	Gln	Phe	Gln	Val	Val	Cys	Glu	Thr
225					230					235					240
Glu	Glu	Asp	Lys	Phe	Leu	Leu	Leu	Tyr	Ala	Leu	Leu	Lys	Leu	Ser	Leu
				245					250					255	
He	Arg	Gly	Lys	Ser	Leu	Leu	Phe	Val	Asn	Thr	Leu	Glu	Arg	Ser	Tyr
			260					265					270		
Arg	Leu	Arg	Leu	Phe	Leu	Glu	Gln	Phe	Ser	lle	Pro	Thr	Cys	Val	Leu
		275					280					285			
Asn	Gly	Glu	Leu	Pro	Leu	Arg	Ser	Arg	Cys	His	He	Пе	Ser	Gln	Phe
	290					295					300				
Asn	Gln	Gly	Phe	Tyr	Asp	Cys	Val	Ile	Ala	Thr	Asp	Ala	Glu	Va]	Leu
305					310					315					320
Gly	Ala	Pro	Val	Lys	Gly	Lys	Arg	Arg	Gly	Arg	G1 y	Pro	Lys	Gly	Asp
				325					330					335	
Lys	Ala	Ser	Asp	Pro	Glu	Ala	Gly	Val	Ala	Arg	Gly	He	Asp	Phe	His
			340					345					350		
His	Val	Ser	Ala	Val	Leu	Asn	Phe	Asp	Leu	Pro	Pro	Thr	Pro	Glu	Ala
		355					360					365			
Tyr	He	His	Arg	Ala	Gly	Arg									
	370					375									
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<211	> 30	9													

<400> 3456

<212> PRT

<213≻ Homo sapiens

Met Leu Pro Glu Asp Ser Gly Gly Ser Pro Asp Ala Ala Ala Ser Asp 1 5 10 15 Lys His lle Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val Trp

			20					25					30		
He	Met	G1 y	Glu	Gly	Pro	Gly	Asp	Lys	Pro	Tyr	Glu	Glu	lle	Ser	Glu
		35					40					45			
G]u	Leu	Пе	Ala	Glu	Arg	Ala	Arg	Leu	Gln	Ala	Gln	Arg	Glu	Ala	Glu
	50					55					60				
Glu	Leu	Trp	Arg	Gln	Lys	Glu	Ala	Glu	Ile	Thr	Lys	Lys	Phe	Arg	Asp
65					70					75					80
Ala	Leu	Ala	Asn	Glu	Lys	Ala	Arg	He	Leu	Ala	Glu	Lys	Trp	Lys	Val
				85					90					95	
Glu	Met	Glu	Asp	Arg	Lys	Ala	Ala	Lys	Val	Leu	Glu	Glu	Arg	He	His
			100					105					110		
Glu	Glu	Phe	Lys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Arg	Gly	Glu	G]u
		115					120					125			
GIn	11e	Arg	Leu	Gln	Glu	-G] u	Gln	Arg	Ala	Lys	Glu	Leu	Tyr	Trp	Thr
	130					135					140				
Leu	Lys	Gln	Ala	Gln	Leu	His	Cys	Gln	Ala	Ser	Glu	Lys	Glu	Glu	Arg
145					150					155					160
Glu	Trp	Glu	Glu		Leu	Arg	Arg	Ser		Ala	Ala	Asp	Glu	Glu	Arg
				165					170					175	
Ser	Arg	Arg	Ala	Gln	Arg	Ala	Arg		Glu	Tyr	Arg	His		Ser	Leu
			180					185					190		
Arg	Ala		Gln	Lys	Gly	Thr		Ala	Gly	Leu	Ser		Met	Phe	Arg
		195					200					205			
Glu		Gly	G1n	Ser	His		GIn	Glu	Ala	Arg		Tyr	His	His	Leu
Б	210	15	<i>a</i>	,	,,	215					220	., .	~		m.
	Asp	Pro	Gly	Leu		GIn	Pro	Leu	Ala		Pro	Val	Ser	Arg	
225	<i>c</i> 1		Б	•	230	ь	37 3	C		235	V 1	7.1	V 1		240
Trp	GJu	Arg	Pro		Arg	Pro	vai	Ser		Asp	Val	116	va1		Гŗр
DL.	1	C1	C1	245	1	D	A	A	250	C1	DI	C1	Λ	255	Т1
Pne	Lys	GIU	Glu	GIn	Leu	Pro	Arg		Ala	61 À	rne	GIU		Asn	ınr
1	Dlan	Ha	260	Due	Tions	Dlac	П4	265	C1	Aan	Т	u	270	Dha	A 22 cz
Lys	rne	275	Ala	110	тр	rne		бгу	GIŸ	ASII	1 y 1		Cys	rne	AI g
Ara	Ara		Thr	Son	610	Thr	280 Lou	Arc	Thr	Cl.	C1v	285	Pro	Thr	Arc
шв	290	\ A 1	111.1	SEI	OTY	295	Leu	лів	1111	oju	300	0111	110	1111	ni g
Leu		Ser	Val	Val		230					500				

<210> 3457

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<211> 235
<212> PRT
<213> Homo sapiens
<400> 3457
Met Gln Ala Ser Leu Leu Leu Ser Cys Leu Pro Leu Ser Ser Leu Ser
                                      10
Thr Val 11e Val Pro Pro Phe Leu Gln Val Asn Asp Leu Asp Gly Tyr
                                 25
Asn Arg Thr Ala Leu His Tyr Ala Ala Glu Lys Asp Glu Ala Cys Val
         35
                             40
                                                  45
Glu Val Leu Leu Glu Tyr Gly Ala Asn Pro Asn Ala Leu Asp Gly Asn
                         55
Arg Asp Thr Pro Leu His Trp Ala Ala Phe Lys Asn Asn Ala Glu Cys
                     70
                                          75
65
Val Arg Ala Leu Leu Glu Ser Gly Ala Ser Val Asn Ala Leu Asp Tyr
                 85
                                     90
Asn Asn Asp Thr Pro Leu Ser Trp Ala Ala Met Lys Gly Asn Leu Glu
                                105
Ser Val Ser lle Leu Leu Asp Tyr Gly Ala Glu Val Arg Val Ile Asn
                            120
                                                 125
        115
Leu 11e Gly Gln Thr Pro 11e Ser Arg Leu Val Ala Leu Leu Val Arg
                        135
                                             140
Gly Leu Gly Thr Glu Lys Glu Asp Ser Cys Phe Glu Leu Leu His Arg
                                                             160
145
                    150
                                         155
Ala Val Gly His Phe Glu Leu Arg Lys Asn Gly Thr Met Pro Arg Glu
                                     170
                165
Val Ala Arg Asp Pro Gln Leu Cys Glu Lys Leu Thr Val Leu Cys Ser
                                185
                                                     190
Ala Pro Gly Thr Leu Lys Thr Leu Ala Arg Tyr Ala Val Arg Arg Ser
                                                 205
        195
                            200
Leu Gly Leu Gln Tyr Leu Pro Asp Ala Val Lys Gly Leu Pro Leu Pro
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210 215 220 Ala Ser Leu Lys Glu Tyr Leu Leu Leu Leu Glu 225 230 235

<210> 3458

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3458

Met Gln Gly Met Gly Leu Gly Leu Ser Ser Val Phe Ala Leu Cys Leu 1 5 10 15

Gly His Thr Ser Ser Phe Cys Glu Ser Val Val Phe Ala Ser Ala Ser 20 25 30

Ile Gly Leu Gln Thr Phe Asn His Ser Gly 11e Ser Val Asn Ile Gln
35 40 45

Asp Leu Ala Pro Ser Cys Ala Gly Phe Leu Phe Gly Val Ala Asn Thr 50 55 60

Ala Gly Ala Leu Ala Gly Val Val Gly Val Cys Leu Gly Gly Tyr Leu 65 70 75 80

Met Glu Thr Thr Gly Ser Trp Thr Cys Leu Phe Asn Leu Val Ala 11e 85 90 95

lle Ser Asn Leu Gly Leu Cys Thr Phe Leu Val Phe Gly Gln Ala Gln
100 105 110

Arg Val Asp Leu Ser Ser Thr His Glu Asp Leu 115 120

<210> 3459

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3459

Met Lys Val Lys Gln Ala Leu Met Val Thr Leu Thr Gln Gln Asp Arg

l 5 10 15 Tyr Pro Tyr Gln Lys Gly Ile Ser Gly His Arg Asp Arg Ala Arg 25 Val Glu Thr Pro Glu Asp Glu Asp Gly Ile Tyr Gln Ala Gly Glu Trp 40 Pro Gln Glu Lys Arg Ala Leu Pro Thr Pro Arg Pro Arg Thr Ser Ser 55 60 Leu Gln Ser Arg Val Lys Arg Asn Phe His His Leu Ser Cys Pro Val 70 75 65 80 Cys Gly Thr Leu Pro Arg Gln Pro Glu Gln Thr Val Gln Ala Pro Lys 90 85 Thr Leu Ser Ala Cys Val Ile Leu Ala Arg Thr Thr Leu Pro Glu Ala 105 Thr Ala Met Ser Lys Leu lle Val Arg Phe Leu Pro Ala Thr Trp Phe 115 120 125

<210> 3460

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3460

Met Leu Arg Leu Arg Lys Gln Gly His Val Arg Arg Arg Gly Lys Ser

1 5 10 15

Ile Gly Glu Asn Lys Asp Thr Gly Gly Asp Ala Thr Trp Arg Ser Pro
20 25 30

Glu Ser Arg Glu Thr Asn Glu Pro Arg Thr Gln Met Ala Lys Lys 35 40 45

Asn Glu Arg Ile Cys Lys Arg Gln His Ser Asn Met Pro Asn Lys Ser 50 55 60

Arg Val Leu Val Phe Lys His Leu Tyr Leu Pro Arg Val Thr Arg Gln
65 70 75 80

Leu lle Ser Phe His lle Cys Ser Arg Phe Val Phe Arg Asn Lys Thr 85 90 95

His Val Leu Lys Ser Cys Leu Tyr Val Ala Pro Val Leu Leu Pro Pro

Pro Pro Val Leu Lys Ser Ile Ser Ala Leu Leu Ile Tyr Gly
115 120 125

<210> 3461

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3461

Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Val Val Thr Leu Lys Gly
1 5 10 15

Val His Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys 20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe
35 40 45

Ser Asn Thr Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 50 55 60

Glu Trp Val Gly Arg Ile Ser Thr Asp Ser Glu Gly Ala Thr Val Asp
65 70 75 80

Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr 11e Ser Arg Asp Asp Ser

85 90 95

Lys Lys Thr Leu Tyr Leu Gln Met Asn Ser Leu Gln Val Glu Asp Thr 100 105 . 110

Ala Val Tyr Tyr Cys Ser Thr Gly Pro Ser Arg Val Pro Gly Thr Gln
115 120 125

Arg Tyr Phe Asp Phe Trp Gly Arg Gly Thr Arg Val Thr Val Ser Ser 130 135 140

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
145 150 155 160

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr

165 170 175

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser 180 185 190

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser

		195					200					205			
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
	210					215					220				
Tyr	Thr	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
225					230					235					240
Arg	Val	Glu	Leu	Lys	Thr	Pro	Leu	Gly	Asp	Thr	Thr	His	Thr	Cys	Pro
				245					250					255	
Arg	Cys	Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg
			260					265					270		
Cys	Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys
		275					280					285			
Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys	Pro
	290					295					300				
Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys
305					310					315					320
Pro	Lys	Asp	Thr	Leu	Met	He	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Va]
				325					330					335	
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln	Phe	Lys	Trp	Tyr
			340					345					350		
Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu
		355					360					365			
Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His
	370					375					380				
	Asp	Trp	Leu	Asn		Lys	Glu	Tyr	Lys		Lys	Val	Ser	Asn	
385					390					395					400
Ala	Leu	Pro	Ala		lle	Glu	Lys	Thr		Ser	Lys	Thr	Lys	Gly	GIn
				405					410	_				415	
Pro	Arg	Glu		Gln	Val	Tyr	Thr		Pro	Pro	Ser	Arg		Glu	Met
			420					425					430	_	
Thr	Lys		GIn	Val	Ser	Leu		Cys	Leu	Val	Lys		Phe	Tyr	Pro
		435					440		•	0.1	0.1	445	٥,		
Ser		lle	Ala	Val	Glu		Glu	Ser	Ser	Gly		Pro	Glu	Asn	Asn
T	450	TI	TI.	D	D	455			C	4	460	C	DI	rol.	
	Asn	Ihr	Ihr	Pro		Met	Leu	Asp	2er		GLy	5er	Phe	Phe	
465	C	1	1	TI.	470	Δ.	1	C	Δ	475	C1	C1	C1.	Acn	480
1 17 24	> or	1 1/10	1 011	1 10 72	M CO I	non	1 1/ 0	> 0 Y	u v c	1100	4 - I 12	4. 122	1 - 1 37	ncr	110

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys <210> 3462 <211> 551 <212> PRT <213> Homo sapiens <400> 3462 Met Ile Ser Pro Asp Pro Arg Pro Ser Pro Gly Leu Ala Arg Trp Ala Glu Ser Tyr Glu Ala Lys Cys Glu Arg Arg Gln Glu Ile Arg Glu Ser Arg Arg Cys Arg Pro Asn Val Thr Thr Cys Arg Gln Val Gly Lys Thr Leu Arg Ile Gln Gln Arg Glu Gln Leu Gln Arg Ala Arg Leu Gln Gln Phe Phe Arg Arg Arg Asn Leu Glu Leu Glu Glu Lys Gly Lys Ala Gln His Pro Gln Ala Arg Glu Gln Gly Pro Ser Arg Arg Pro Gly Gln Val Thr Val Leu Lys Glu Pro Leu Ser Cys Ala Arg Arg Ile Ser Ser Pro Arg Glu Gln Val Thr Gly Thr Ser Ser Glu Val Phe Pro Ala Gln His Pro Pro Pro Ser Gly Ile Cys Arg Asp Leu Ser Asp His Leu Ser Ser Gln Ala Gly Gly Leu Pro Pro Gln Asp Thr Pro Ile Lys Lys Pro Pro Lys His His Arg Gly Thr Gln Thr Lys Ala Glu Gly Pro Thr Ile Lys

Asn Asp Ala Ser Gln Gln Thr Asn Tyr Gly Val Ala Val Leu Asp Lys

			180					185					190		
Glu	11e	He	Gln	Leu	Ser	Asp	Tyr	Leu	Lys	Glu	Ala	Leu	Gln	Arg	Glu
		195					200					205			
Leu	Val	Leu	Lys	Gln	Lys	Met	Val	He	Leu	G] n	Asp	Leu	Leu	Ser	Thr
	210					215					220				
Leu	He	Gln	Ala	Ser	Asp	Ser	Ser	Trp	Lys	Gly	Gln	Leu	Asn	Glu	Asp
225					230					235					240
Lys	Leu	Lys	Gly	Lys	Leu	Arg	Ser	Leu	Glu	Asn	Gln	Leu	Tyr	Thr	Cys
				245					250					255	
Thr	Gln	Lys	Tyr	Ser	Pro	Trp	G1 y	Met	Lys	Lys	Val	Leu	Leu	Glu	Met
			260					265					270		
Glu	Asp	Gln	Lys	Asn	Ser	Tyr	Glu	Gln	Lys	Ala	Lys	Glu	Ser	Leu	Gln
		275					280					285			
Lys	Val	Leu	Glu	Glu	Lys	Met	Asn	Ala	Glu	Gln	Gln	Leu	Gln	Ser	Thr
	290					295					300				
Gln	Arg	Ser	Leu	Ala	Leu	Ala	Glu	Gln	Lys	Cys	Glu	Glu	Trp	Arg	Ser
305					310					315					320
Gln	Tyr	Glu	Ala		Lys	Glu	Asp	Trp	Arg	Thr	Leu	Gly	Thr	Gln	His
				325					330					335	
Arg	Glu	Leu		Ser	GIn	Leu	His		Leu	Gln	Ser	Lys		G1n	Gly
			340					345					350		
Ala	Asp		Arg	Лsp	Leu	Gln		Asn	Gln	Ala	Leu		Phe	Leu	Glu
		355					360					365			
Asn		His	GIn	Glu	Leu	Gln	Ala	Lys	He	Glu		Leu	GIn	Gly	Asp
	370					375	æ,	0.1		,	380		0.1		,
	Asp	Leu	Cys	Ser		Asp	Ihr	GIn	Asp		GIn	Asp	GIn	Leu	
385	C	C1	4.1	C1	390	1	TI -	1	V. 3	395	A	W - 1	C1	C1	400
Arg	ser	GIU	Ala		Lys	Leu	Inr	Leu		ınr	Arg	vai	GIN		Leu
Cl _n	C1	Lau	Lou	405	Aan	C15	Con	Lou	410	Lan	Cln	C1	Cln	415	Luc
GIII	GIŅ	Leu	420	GIII	ASII	Gln	261	425	GIII	Leu	GIH	Glu	430	Giu	LyS
Lou	Lou	The		Lvc	Acn	Gln	Ala		Pro	Val	Trn	Sor		Lve	Sor
Leu	Leu	435	LYS	Lyo	nsp	0111	440	Leu	110	· a 1	пЪ	445	110	Lyo	961
Phe	Pro		նես	Val	Glu	Pro		Glv	Thr	Glv	lve		lvs	Asn	Trn
7 110	450	11011	oru	101	Olu	455	Giu	G1 y	1111	оту	460	Olu	Lyo	den	119
	.50										.00				

Asp Leu Arg Asp Gln Leu Gln Lys Lys Thr Leu Gln Leu Gln Ala Lys Glu Lys Glu Cys Arg Glu Leu His Ser Glu Leu Gly Asn Leu Ser Asp Glu Tyr Leu Ser Cys Leu Arg Lys Leu Gln His Cys Arg Glu Glu Leu Asn Gln Ser Gln Gln Leu Pro Pro Arg Arg Gln Cys Gly Arg Trp Leu Pro Val Leu Met Val Val Ile Ala Ala Ala Leu Ala Val Phe Leu Ala Asn Lys Asp Asn Leu Met Ile

<210> 3463

<211> 1047

<212> PRT

<213> Homo sapiens

<400> 3463

Met Ala Glu Lys Arg Pro Leu Arg Thr Leu Gly Pro Val Met Tyr Gly Lys Leu Pro Arg Leu Glu Thr Asp Ser Gly Leu Glu His Ser Leu Pro His Ser Val Gly Asn Gln Asp Pro Cys Thr Tyr Lys Gly Ser Tyr Phe Ser Cys Pro Met Ala Gly Thr Pro Lys Ala Glu Ser Glu Gln Leu Ala Ser Trp Thr Pro Tyr Pro Pro Leu Tyr Ser Thr Gly Met Ala Gly Pro Pro Leu Gln Ala Asp Asn Leu Leu Thr Asn Cys Leu Phe Tyr Arg Ser Pro Ala Glu Gly Pro Glu Lys Met Gln Asp Ser Ser Pro Val Glu Leu Leu Pro Phe Ser Pro Gln Ala His Ser Tyr Pro Gly Pro Pro Leu Ala

Ala		Lys	Pro	Val	Tyr	Arg 135	Asn	Pro	Leu	Cys	Tyr 140	Gly	Leu	Ser	Thr
	130	61	61	0.1			,		Б			,, ,		ar.	T)
	Leu	GIY	Giu	Gly		Val	Lys	Arg	Pro		Asp	val	Asp	irp	
145					150	_	•>			155				~	160
Leu	Ala	Thr	Gly		Leu	Leu	Pro	Ser		Asp	Pro	Pro	Cys		Leu
_				165					170					175	
Λla	Pro	Ala		Ser	Lys	Gly	GIn		Leu	Asp	Gly	Thr		Leu	Arg
			180					185					190		
Gly	Val	Pro	Ala	Glu	Gly	Ser	Ser	Lys	Asp	Ser	Ser	Gly	Ser	Phe	Ser
		195					200					205			
Pro	Cys	Gln	Pro	Phe	Leu	Glu	Lys	Tyr	G1n	Thr	lle	His	Ser	Thr	Gly
	210					215					220				
Phe	Leu	Ala	Ser	Arg	Tyr	Thr	Gly	Pro	Tyr	Pro	Arg	Asn	Ser	Lys	Gln
225					230					235					240
Ala	Met	Ser	Glu	Gly	Pro	Ser	Ser	Pro	Trp	Thr	Gln	Leu	Ala	Gln	Pro
				245					250					255	
Leu	Gly	Pro	Pro	Cys	Gln	Asp	Thr	Gly	Pro	Thr	His	Tyr	Pro	Pro	Pro
			260					265					270		
His	His	Pro	Pro	Pro	His	Pro	Pro	Gln	Ala	Leu	Pro	Cys	Pro	Pro	Ala
		275					280					285			
Cys	Arg	His	Pro	Glu	Lys	Gln	Gly	Ser	Tyr	Ser	Pro	Ala	Leu	Pro	Leu
	290					295					300				
Gln	Pro	Leu	Gly	Gly	His	Lys	Gly	Thr	Gly	Tyr	Gln	Ala	Gly	Gly	Leu
305					310					315					320
Gly	Ser	Pro	Tyr	Leu	Arg	Gln	Gln	Ala	Ala	Gln	Ala	Pro	Tyr	lle	Pro
				325					330					335	
Pro	Leu	Gly	Leu	Asp	Ala	Tyr	Pro	Tyr	Pro	Ser	Ala	Pro	Leu	Pro	Ala
			340					345					350		
Pro	Ser	Pro	Gly	Leu	Lys	Leu	Glu	Pro	Pro	Leu	Thr	Pro	Arg	Cys	Pro
		355					360					365			
Leu	Asp	Phe	Ala	Pro	Gln	Thr	Leu	Ser	Phe	Pro	Tyr	Ala	Arg	Asp	Asp
	370					375					380				
Leu	Ser	Leu	Tyr	Gly	Ala	Ser	Pro	Gly	Leu	Gly	Gly	Thr	Pro	Pro	Ser
385					390					395					400
Gln	Asn	Asn	Val	Arg	Ala	Val	Pro	GIn	Pro	G1 v	Ala	Phe	G1n	Arg	Ala

				405					410					415	
Cys	Gln	Pro	Leu	Pro	Ala	Ser	Gln	Pro	Cys	Ser	Glu	Pro	Val	Arg	Pro
			420					425					430		
Ala	Gln	Glu	Ala	Glu	Glu	Lys	Thr	Trp	Leu	Pro	Ser	Cys	Arg	Lys	G] u
		435					440					445			
Lys	Leu	Gln	Pro	Arg	Leu	Ser	Glu	His	Ser	Gly	Pro	Pro	He	Val	He
	450					455					460				
Arg	Asp	Ser	Pro	Val	Pro	Cys	Thr	Pro	Pro	Ala	Leu	Pro	Pro	Cys	Ala
465					470					475					480
Arg	Glu	Cys	Gln	Ser	Leu	Pro	Gln	Lys	Glu	Asp	Ala	Arg	Pro	Pro	Ser
				485					490					495	
Ser	Pro	Pro	Met	Pro	Val	He	Asp	Asn	Va]	Phe	Ser	Leu	Ala	Pro	Tyr
			500					505					510		
Arg	Asp	Tyr	Leu	Asp	Va]	Pro	Ala	Pro	Glu	Ala	Thr	Thr	Glu	Pro	Asp
		515					520					525			
Ser	Ala	Thr	Ala	Glu	Pro	Asp	Ser	Ala	Pro	Ala	Thr	Ser	Glu	Gly	Gln
	530					535					540				
Asp	Lys	Gly	Cys	Arg	Gly	Thr	Leu	Pro	Ala	Gln	Glu	Gly	Pro	Ser	G1 y
545					550					555					560
Ser	Lys	Pro	Leu	Arg	Gly	Ser	Leu	Lys	Glu	Glu	Val	Ala	Leu	Asp	Leu
				565					570					575	
Ser	Val	Arg	Lys	Pro	Thr	Ala	Glu	Ala	Ser	Pro	Val	Lys	Ala	Ser	Arg
			580					585					590		
Ser	Val	Glu	His	Ala	Lys	Pro	Thr	Ala	Ala	Met	Asp		Pro	Asp	Val
		595					600					605			
Gly		Met	Val	Ser	Asp		Pro	Gly	Leu	Lys		lle	Asp	Thr	Glu
	610					615					620				
	Pro	Gly	Leu	Pro		Va1	Pro	Val	Thr		Asp	Ala	Met	Pro	
625				_	630					635					640
Thr	Asn	Phe	His		Ser	Val	Ala	Phe		Phe	Arg	Lys	Phe		He
				645	,	15			650	., .	15		· ·	655	<i>m</i> 1
Leu	Arg	Pro		Pro	Leu	Pro	Ala		Val	Val	Pro	Ser		Pro	Thr
C	4 7	ь	660	15	TI	C1	10	665	ь	TI	D.	TI	670	<i>c</i> ,	D
Ser	Ala	Pro	Ala	Pro	Ihr	GIn		Ala	Pro	Thr	Pro		Ser	Gly	Pro
7 7	6.3	675					680	0.1	Б		C	685	Tr)		D'
116	GIy	Leu	Arg	He	Leu	Ala	GIn	GIn	Pro	Leu	Ser	val	Ihr	Cys	Phe

	690					695					700				
Ser	Leu	Ala	Leu	Pro	Ser	Pro	Pro	Ala	Val	Ala	Val	Ala	Ser	Pro	Ala
705					710					715					720
Pro	Ala	Pro	Ala	Pro	Ser	Pro	Ala	Pro	Ala	Arg	Ala	Gln	Ala	Pro	Ala
				725					730					735	
Ser	Ala	Arg	Asp	Pro	Ala	Pro	Ala	Pro	Ala	Pro	Val	Ala	Gly	Pro	Ala
			740					745					750		
Pro	Ala	Ser	Thr	Ser	Ala	Pro	Gly	Asp	Ser	Leu	Glu	Gln	His	Phe	Thr
		755					760					765			
Gly	Leu	His	Ala	Ser	Leu	Cys	Asp	Ala	Ile	Ser	Gly	Ser	Val	Ala	His
	770					775					780				
Ser	Pro	Pro	Glu	Lys	Leu	Arg	Glu	Trp	Leu	Glu	Thr	Ala	Gly	Pro	Trp
785					790					795					800
Gly	Gln	Ala	Ala	Trp	Gln	Asp	Cys	Gln	Gly	Va]	Gln	Gly	Leu	Leu	Ala
				805					810					815	
Lys	Leu	Leu	Ser	Gln	Leu	Gln	Arg	Phe	Asp	Arg	Thr	His	Arg	Cys	Pro
			820					825					830		
Phe	Pro	His	Val	Val	Arg	Ala	Gly	Ala	Ile	Phe	Val	Pro	Ile	His	Leu
		835					840					845			
Val	Lys	Glu	Arg	Leu	Phe	Pro	Arg	Leu	Pro	Pro	Ala	Ser	Val	Asp	His
	850					855					860				
Val	Leu	Gln	Glu	His	Arg	Val	Glu	Leu	Arg	Pro	Thr	Thr	Leu	Ser	G1 u
865					870					875					880
Glu	Arg	Ala	Leu	Arg	Glu	Leu	Ala	Leu	Pro	Gly	Cys	Thr	Ser	Arg	Met
				885					890					895	
Leu	Lys	Leu	Leu	Ala	Leu	Arg	Gln	Leu	Pro	Asp	He	Tyr	Pro	Asp	Leu
			900					905					910		
Leu	Gly	Leu	Gln	Trp	Arg	Asp	Cys	Val	Arg	Arg	Gln	Leu	Gly	Asp	Phe
		915					920					925			
Asp		Glu	Ala	Gly	Ala	Val	Ser	Ser	Ser	G] u		Thr	Val	Ala	Arg
	930					935					940				
Asp	Glu	Pro	Glu	Ser		Ala	Leu	Ala	Gln		Ser	Pro	Ala	Pro	Lys
945					950					955					960
Val	Arg	Lys	Pro		Arg	Lys	Pro	Pro		Pro	Gly	Pro	Glu		Ala
6.1				965					970			n		975	
Glu	Ala	Ala	Ala	G1v	Glu	Glu	Ser	Cvc	GLv	Ala	Ser	Pro	Thr	Pro	Ala

Thr Ser Ala Ser Pro Pro Gly Pro Thr Leu Lys Ala Arg Phe Arg Ser Leu Leu Glu Thr Ala Trp Leu Asn Gly Leu Ala Leu Pro Thr Trp Gly His Lys Ser Ser Arg Pro Asp Gln Pro Ser Pro Cys Pro Gln Leu Leu Asp Ser Gln Ser His His Leu <210> 3464 <211> 358 <212> PRT <213> Homo sapiens <400> 3464 Met Gln Arg Ser Pro His Ala Ala Glu Thr Gly Val Pro Thr Gly Ser Ala Lys Val Thr Thr Gln Gln Arg Gln Ala Ser Cys Gly Gln Cys Arg Gly His His His Ala Ala Glu Thr Gly Val Leu Trp Ala Val Gln Arg Ser Pro Pro Arg Ser Arg Asp Arg Pro Val Gly Asp Ala Glu Val Thr Pro Arg Ser Arg Asp Arg Pro Val Gly Asp Ala Glu Val Thr Thr Gln Gln Arg Arg Ala Ser Pro Gln Ala Val Gln Arg Ser Pro Pro Arg Ser Arg Asp Arg Pro His Gly Gln Cys Lys Gly His His His Thr Ala Glu He Gly Val Leu Trp Ala Met Gln Arg Ser Pro Pro Arg Ser Arg Asp Arg Pro Val Gly Asp Ala Glu Val Thr Pro

Arg Ser Arg Asp Arg Pro Val Gly Asp Ala Glu Val Thr Thr

145	•				150					155					160
Gln	Gln	Arg	Arg	Ala	Ser	Pro	Gln	Ala	Val	Gln	Arg	Ser	Pro	Pro	His
				165					170					175	
Ser	Arg	Asp	۸rg	Arg	Pro	His	Gly	Gln	Cys	Arg	Gly	His	His	His	Ala
			180					185					190		
Ala	Glu	Thr	Gly	Val	Pro	Thr	Gly	Ser	Ala	Glu	Val	Thr	Thr	Thr	Gln
		195					200					205			
Gln	Arg	Gln	Ala	Ser	Cys	Gly	Gln	Cys	Arg	Gly	His	His	His	Ala	Ala
	210					215					220				
Glu	Thr	Gly	Val	Leu	Trp	Ala	Val	Gln	Arg	Ser	Pro	Pro	Arg	Ser	Arg
225					230					235					240
Asp	Gly	Arg	Pro	His	Arg	Gln	Cys	Arg	Gly	His	His	His	Thr	Ala	Glu
				245					250					255	
Thr	Gly	Val	Leu	Trp	Ala	Val	Gln	Arg	Ser	Pro	Pro	Arg	Ser	Arg	Asp
			260					265					270		
Arg	Arg	Pro	Val	Gly	Ser	Ala	Glu	Val	Thr	Thr	Leu	Ser	G]n	Thr	Val
		275					280					285			
Leu	Gly	Leu	Pro	Trp	Val	Glu	His	Arg	Met	Lys	Thr	Met	Cys	Phe	Glu
	290					295					300				
Pro	Trp	Lys	Asp	Asn	Gln	Pro	Ser	Gln	Ser	Gln	Ser	Leu	Lys	Gln	Ala
305					310					315					320
Ala	Pro	Arg	Ala	Gln	Leu	Gln	Glu	Ala	Ala	Ser	Ser	Arg	Gly	Leu	Gln
				325					330					335	
Gln	Gly	61y	Gly	Arg	Cys	Val	Pro	Ser	Val	Ala	Ser	Trp	Cys	Pro	Leu
			340					345					350		
Met	Ser	Arg	Ser	Val	Arg										
		355													

<210> 3465

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3465

Met Ser Arg Ser Val Leu Glu Ala Leu Thr Ser Ser Thr Ala Met Gln

1				5					10					15	
Cys	Val	Pro	Ser	Asp	Gly	Cys	Ala	Met	Leu	Leu	Arg	Val	Arg	Ala	Ser
			20					25					30		
He	Thr	Leu	His	Glu	Arg	Leu	Arg	Gly	Leu	Glu	Ala	Cys	Ala	Met	Ser
		35					40					45			
Leu	Asp	Thr	Gln	Glu	Thr	Gln	Cys	Gln	Ser	Val	Trp	Val	Ala	Arg	Ala
	50					55					60				
Ser	His	Arg	Gln	Gln	Arg	Gly	Arg	Gln	Leu	Gln	Val	His	Phe	Gly	Cys
65					70					75					80
Phe	Ala	Val	Ser	Val	Ala	Gln	His	Leu	Tyr	Val	Thr	Leu	Arg	Thr	Ile
				85					90					95	
Pro	His	Phe	Cys	Gly	Val	Gln	Leu	Asp	Gln	Arg	His	Leu	Val	Glu	Ala
			100					105					110		
Gly	Lys	Leu	Ser	Tyr	Trp	Va]	Asp	Arg	Arg	Arg	Lys	Ala	He	Leu	Val
		115					120					125			
Gln		Pro	Arg	Ala	Ser	Gly	Ser	Pro	Asp	Tyr	Tyr	Leu	Arg	Leu	Cys
	130					135					140				
	Lys	Arg	Phe	Thr		Glu	Asp	Ala	Gly		Pro	Val	Arg	Val	
145					150					155	_				160
Ala	Asn	Ser	Val		GIn	Ala	Val	Phe		Pro	Tyr	Ser	Gln		Leu
				165	0.3	0.1	<i>m</i>		170	mı				175	
Pro	Cys	Leu		Leu	GJu	Gly	Trp		Ala	Thr	Pro	Asp		Val	Arg
11.	C1.	11.	180	D	DI	C1	٨	185	TI	C1	4.1	,	190	u t	,
116	GIII	195	Cys	PTO	rne	Glu	200	Asp	ınr	GIU	Ala	205	GIU	vai	Leu
Trn	Acn		Val	Tyr	Tyre	Hic		C1	Sor	Cln	Thr		Son	Tan	Clu
1.112	210	1111	vai	1) 1	ı yı	His 215	110	UIU	361	0111	220	Leu	261	пр	Olu
Pro		Cvs	Pro	Val	Ser	Gly	His	Val	Ser	Leu		Trn	Aro	Pro	Glv
225		0,0	110	, (1)	230	01,	1113		oc.	235	0,5	пр	111 5	110	240
	G1v	Ala	Glv	Cvs		Lys	Leu	Gln	Gln		Ser	Gln	Leu	Val	
			•	245	Q				250					255	
Arg	Arg	Val	Gln		Pro	Leu	Val	Asp		Gln	Pro	Gln	Leu		Leu
-			260	-				265					270	•	
Lys	Phe	Ser		Ser	Trp	Gly	Ser		Val	Arg	Cys	Pro	Phe	Glu	Gln
		275					280					285			
Arg	Arσ	Phe	Pro	Thr	Pro	Pro	Thr	Ser	Ara	Cve	Thr	Cvs	Val	Thr	Glv

290	295	300
Gly Ser His Ser Ser L	Leu Pro Ala Asn Ala Hi	s Ser Arg Pro Ala Arg
305 3	310	5 320
Ser Leu Gln Pro Gln V	/al Thr Trp Gln Pro Pr	o Leu Leu Pro Ser
325	330	335
<210> 3466		
<211> 295		
<212> PRT		
<213> Homo sapiens		
(100) 0.400		
<400> 3466	One Ang The Ley Vol. Le	u Lou Lou Son Cly Alo
net Ara var met Ara F	Pro Arg Thr Leu Val Le 10	u Leu Leu Ser Gry Ara
•	Γhr Trp Ala Gly Ser Hi	
20	25	30
	Arg Pro Gly Arg Gly Gl	
35	40	45
Val Gly Tyr Val Asp A	Asp Thr Gln Phe Val Ar	g Phe Asp Ser Asp Ala
50	55	60
Ala Ser Gln Arg Met G	Glu Pro Arg Ala Pro Tr	p lle Glu Gln Glu Gly
65	70 7	5 80
Pro Glu Tyr Trp Asp A	Arg Asn Thr Arg Asn Va	l Lys Ala His Ser Gln
85	90	95
Thr Asp Arg Arg Tyr L	leu Glu Asn Gly Lys Gl	u Thr Leu Gln Arg Thr
100	105	110
	tis Met Thr His His Al	
115	120	125
	Irp Ala Leu Ser Phe Ty	
130	135	140
	Asp Gly Glu Asp Gln Th	
	150 15	
	Ala Gly Asp Gly Thr Ph	
165	170	175

Val Val Val Pro Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln

His Glu Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Pro Thr 11e Pro 11e Val Gly 11e 11e Ala Gly Leu Val Leu Phe Gly Ala Val Ile Ala Gly Ala Val Val Ala Ala Val Met Trp Arg Arg Lys Ser Ser Gly Gly Glu Gly Met Lys Gly Gly Ser Glu 11e Ser Cys Leu Thr Glu Gly Ser Lys Thr Gln Val Glu Val Cys Pro Ala Ser Leu Leu Gly Ser Thr Ile His Asn Tyr Glu Pro Thr Gln Pro Gly Pro Cys Val Pro Ala Leu Thr Leu Leu

<210> 3467

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3467

Met Glu Gly Leu Val Phe Leu Asn Ala Leu Ala Thr Arg Leu Leu Phe Leu Leu His Ser Leu Val Gly Val Trp Arg Val Thr Glu Val Lys Lys

Glu Pro Arg Tyr Trp Leu Leu Ala Leu Leu Asn Leu Leu Leu Phe Leu

Glu Thr Ala Leu Thr Leu Lys Phe Lys Arg Gly Arg Gly Tyr Lys Trp

Phe Ser Pro Ala Ile Phe Leu Tyr Leu Ile Ser Ile Val Pro Ser Leu

Trp Leu Leu Glu Leu His His Glu Thr Gln Tyr Cys Ser Ile Gln Ala

Glu Gly Thr Ser Gln Asn Thr Ser Arg Lys Glu Asp Phe Asn Gln Thr

			100					105					110		
Leu	Thr	Ser	Asn	Glu	Gln	Thr	Ser	Arg	Ala	Asp	Asp	Leu	He	Glu	Thr
		115					120					125			
Ala	Lys	Val	Phe	Val	Asn	Asn	Leu	Ser	Thr	Va]	Cys	Glu	Lys	Val	Trp
	130					135					140				
Thr	Leu	Gly	Leu	His	Gln	Thr	Phe	Leu	Leu	Met	Leu	He	He	Gly	Arg
145					150					155					160
Trp	Leu	Leu	Pro	lle	Gly	Gly	Gly	He	Thr	Arg	Asp	Gln	Leu	Ser	Gln
				165					170					175	
Leu	Leu	Leu	Met	Phe	Val	Gly	Thr	Ala	Ala	Asp	lle	Leu	Glu	Phe	Thr
			180					185					190		
Ser	Glu	Thr	Leu	Glu	Glu	Gln	Asn	Val	Arg	Asn	Ser	Pro	Ala	Leu	Va]
		195					200					205			
Tyr	Ala	He	Leu	Val	He	Trp	Thr	Trp	Ser	Met	Leu	Gln	Phe	Pro	Leu
	210					215					220				
Asp	Leu	Ala	Val	Gln	Asn	Val	Val	Cys	Pro	Val	Ser	Val	Thr	Glu	Arg
225					230					235					240
Gly	Phe	Pro	Ser	Leu	Phe	Phe	Cys	Gln	Tyr	Ser	Ala	Asp	Leu	Trp	Asn
				245					250					255	
Ile	Gly	He	Ser	Val	Phe	lle	Gln	Asp	Gly	Pro	Phe	Leu	Val	Val	Arg
			260					265					270		
Leu	He	Leu	Met	Thr	Tyr	Phe	Lys	Val	He	Asn	GIn	Met	Leu	Val	Phe
		275					280					285			
Phe	Ala	Ala	Lys	Asn	Phe		Val	Val	Val	Leu	Gln	Leu	Tyr	Arg	Leu
	290					295					300				
	Val	Leu	Ala	Leu	Ala	Val	Arg	Ala	Ser			Ser	Gln	Ser	
305					310					315					320
Gly	Leu	Lys	Gly		His	Gly	Cys	Arg		Gln	Thr	Ser	Glu		Gly
_				325	_				330					335	
Pro	Ser	GIn		Asp	Trp	Gln	Asn		Ser	Lys	Glu	Gly		Ala	He
Б.			340				m	345				,,, <i>,</i>	350	ar i	15
Pro	Leu		Gly	Ser	Pro	Val		Ser	Asp	Asp	5er		His	Ihr	Pro
		355					360					365			

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<211> 200
<212> PRT
<213> Homo sapiens
<400> 3468
Met Gly Val Pro Asn Phe Leu Ser Phe Phe Ser Phe Leu Phe Phe
                 5
                                    10
Phe Lys Ser Leu Arg Gln Gly Leu Ala Gln Leu Pro Arg Leu Glu Cys
             20
                                 25
                                                     30
Ser Gly Thr Ile Ser Ala His Cys Ser Leu Asn Leu Leu Gly Ser Ser
                             40
Asp Pro Pro Thr Leu Ala Ser Ser Ile Ser Gly Thr Ala Gly Thr His
     50
                         55
His His Ala Gln Leu lle Phe Phe Phe Phe Leu Arg Gln Gly Leu
65
                     70
Thr Leu Ser Pro Thr Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys
                 85
                                     90
Asn Leu Cys Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln
            100
                                                    110
                                105
Val Ala Gly Asn Thr Gly Val His His His Thr Arg Leu Ile Phe Val
                            120
                                                125
Phe Leu Leu Glu Thr Arg Phe Cys His Val Gly Gln Thr Gly Leu Lys
                        135
Leu Leu Ile Ser Gly Asp Gln Pro Thr Leu Ala Ser Gln Ser Ala Gly
145
                    150
                                        155
                                                            160
lle Thr Gly Met Ser Cys Arg Ala Gln Pro Cys Phe Pro Tyr His Leu
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170

190

Ser Arg Ala Pro Cys Val Arg Gly Leu Gly Pro Leu Ser His His Lys

200

185

195

180

Leu Gln Arg Gly Ser Ala Ala Thr

165

<210> 3469 <211> 128

<212> PRT

<213> Homo sapiens

<400> 3469

Met Ile Gln Leu Pro Pro Thr Arg Ser Leu Ser Gln His Leu Gly Ile

1 5 10 15

Gln Gly Glu Ile Trp Val Gly Thr Gln Pro Asn His lle Thr Ala Pro 20 25 30

Glu Leu Asn Phe Ser Trp Asn Cys Ser Ser Tyr Glu Gly Glu Phe Ser 35 40 45

Ile Val Pro Thr Ser Gln Leu Ser Ser Gly His Asp Val Ser Asn Trp 50 55 60

His Gly Leu Gly Gln Ala Leu Cys Thr Ser Cys Asn Gly Val Leu Glu 65 70 75 80

Arg Ile His Leu His Phe Gln Leu Leu His Trp Gln Val Gly Val Ser 85 90 95

Pro Asp 11e Arg Lys Gly Leu Asn Ala Gly Gln Ser Lys Lys Asn Asp 100 105 110

Thr Cys Pro Phe Leu Leu Glu His Asp Gly Cys Glu Glu Asp Arg Arg 115 120 125

<210> 3470

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3470

Met Val Glu Leu Thr Val Ala Ala Arg Gln Ala Tyr Lys Thr Met Leu

1 5 10 15

Glu Asn Val Gln Gln Glu Leu Val Gly Glu Pro Arg Pro Gln Ala Pro 20 25 30

Pro Ser Leu Pro Met Gly Val Val Ala Ala Thr Leu Glu Val Val Gly
35 40 45

Thr Arg Ala Met Gly Val Ala Gly 11e Met Thr Val Asp Leu Glu Gly 50 55 60

Met Asp Met Asp Met Asp Val Pro Glu Thr lle Met Ala Glu Thr Arg

Val Val Met Thr Ala Thr Gln Glu Glu lle Thr Glu Thr Ile Met Thr Thr Glu Met Arg His Ala His Asn lle Asp Thr Gln Gly Ile Ile Ser Asp Pro Gly Ser Ser Phe Gln Met Ala Val Phe lle Lys Val Phe Gly Ala Ala Leu Lys His Leu Ile Leu <210> 3471 <211> 168 <212> PRT <213> Homo sapiens <400> 3471 Met Gly Ile Ser Arg Thr Ala Pro Gln Gly Thr Gly Gly Ile Ile Leu Gln Gly Pro Leu Leu Pro Met Lys Asp Thr Arg Glu Met Leu Leu Arg Lys Leu Glu Leu Cys Ala Phe Asp His Leu Val Cys Pro Pro Ile Leu Pro Ser Glu Gly Leu Gly Glu Arg Arg Asn Ala Pro Ser Glu Gly Leu Gly Glu Arg Arg Asn Ala Arg Gly Arg Cys Ala Leu Gln Arg Leu Tyr . 70 Gln His Gln Lys Lys Ala Gly Arg Val Phe Leu Glu Glu Gly Gly Arg Arg Pro Ala Val Ala Gly Arg Leu Ala Gly Gln Glu Arg Pro Ile Ser Ala Val Leu Ser Ser Gly Leu Gln His Pro Thr Trp Arg Thr Pro Leu Pro Leu Ser Ser Thr Val Ala Leu Leu Ser Trp Cys Pro Leu Asn Ala

Tyr Leu Pro Phe Val Pro Pro Asn Leu Ser Arg Pro Pro Gln Val Thr

His Phe Leu Ser Cys Ser Glu Leu <210> 3472 <211> 189 <212> PRT <213> Homo sapiens <400> 3472 Met Gly Trp Lys Lys Ile Gln Glu Ser Ser Ala Gln Ile Trp Trp Leu Lys Glu Glu Gln Trp Pro Gln Glu Val Val Glu Gln Glu Gly Pro Arg lle Glu Pro Arg Arg Thr Met Val Phe Lys Gly Pro Ala Lys Glu Thr Ser Arg Arg Lys Val Lys Ser Val Val Ser Gln Lys Ser Arg Glu Lys Val Ser Arg Asn Ser Gln Gln Cys Glu Ile Leu Leu Cys Lys Ser Ile Met Val Arg Ala Arg Lys Asp Pro Leu Asp Thr Thr Arg Trp Trp Ser Gly 11e Val Pro Arg Thr Ala Ser Met Val Cys Trp Ser Ser Gln Leu Pro Val Gly Leu Arg Ser Lys Gln Gly Arg Val Gln Arg Gly Arg Leu Glu Arg Val Ala Ala Gly Gly Gly Cys Cys Phe Leu Gly Ser His Pro His Ala Pro Thr Gly Cys His Ser Ala Trp Phe Pro Cys Leu Ala Pro Leu Leu Pro Leu Pro Ser Ser Gly Leu Gln Asp Gly Leu Asp Ser Gly

Leu Ser Gly Tyr Ile Asp Leu Asn Lys Ser Pro Lys Phe

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<210> 3473
<211> 200
<212> PRT
<213> Homo sapiens
<400> 3473
Met Pro Arg Gly Leu Ala Asp Lys Gln Gly Pro Glu Glu Cys Asp Ala
                                      10
                                                          15
Val Ala Leu Leu Ser Leu Ile Asn Ser Cys Asp His Phe Val Val Asp
                                 25
             20
Arg Lys Lys Val Thr Glu Val Ile Lys Cys Arg Asn Glu Ile Met His
                             40
                                                  45
Ser Ser Glu Met Lys Val Ser Ser Thr Trp Leu Arg Asp Phe Gln Met
     50
                         55
                                              60
Lys Ile Gln Asn Phe Leu Asn Glu Phe Lys Asn Ile Pro Glu Ile Val
                     70
Ala Val Tyr Ser Arg Ile Glu Gln Leu Leu Thr Ser Asp Trp Ala Val
                 85
                                      90
His Ile Pro Glu Glu Asp Gln Arg Asp Gly Cys Glu Cys Glu Met Gly
            100
                                105
                                                     110
Thr Tyr Leu Ser Glu Ser Gln Val Asn Glu Ile Glu Met Gln Leu Leu
                            120
                                                 125
Lys Glu Lys Leu Gln Glu lle Tyr Leu Gln Ala Glu Glu Gln Glu Val
    130
                                             140
                        135
Leu Pro Glu Glu Leu Ser Asn Arg Leu Glu Val Val Lys Glu Phe Leu
                    150
                                        155
Arg Asn Asn Glu Asp Leu Arg Asn Gly Leu Thr Glu Asp Met Gln Lys
                                     170
                165
                                                         175
Leu Asp Ser Leu Cys Leu His Gln Lys Leu Asp Ser Gln Glu Pro Gly
            180
                                185
                                                     190
Arg Gln Thr Pro Asp Arg Lys Ala
```

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<211> 120
<212> PRT
<213> Homo sapiens
<400> 3474
Met Asp Gly Arg Ala Ala Gly Gly Arg Gly Gly Phe Leu Arg Arg
                                     10
Glu Val Gly Ser Leu Gln Pro Pro Ser His Cys Pro His Pro Thr Val
             20
                                 25
                                                      30
Trp Leu Leu Pro Gly Leu Ser Phe Pro Ile Cys Glu Thr Gly Glu Met
                             40
                                                  45
Gly Ser Leu Ser Gly Pro Arg Ser Ile Leu Met Gly Val Arg Ala Trp
                         55
                                              60
Gln Gly Leu Cys Arg Leu Gly Ser Glu Leu Gly Arg Pro Gly Cys Val
65
                     70
                                          75
Ala Thr Gly Val Ser Ala Pro Thr Ser Pro Phe Glu Thr Cys Pro Ala
                 85
                                     90
Phe Leu Phe Ala Ala Ala Thr Ala Val Arg Phe Ala Thr Arg Ser Cys
            100
                                 105
                                                     110
Gly Cys Pro Pro Arg Gln Gly Asp
        115
                            120
<210> 3475
<211> 155
<212> PRT
<213> Homo sapiens
<400> 3475
Met Glu Pro Leu Asn Ser Ala Val Phe Asn Leu Arg Glu Asp Arg Val
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Gly Gln Phe Ser Trp Gln Gln Leu Arg Glu Gly Glu Ser Arg Glu Gln

Gly Ser Asp Lys Val Cys Leu Ala Gly Ser Lys His Phe Met Glu Trp

Arg Pro Leu Ala Val Arg Asp Leu Arg Lys Ile Cys Gln Gly Leu Leu

40

35

25

50 55 60 His Ser Glu Gly Leu Gln Phe Gly Trp Leu Gly Thr Leu Leu Pro Cys 70 75 Thr Asp Gly Ala Pro Ile Ser Met Thr Arg Val Leu Val Gln Thr Gln 85 90 Phe Ile Val Phe Thr Asn Ser Met His Ser Asn Gln Thr Glu Ile Glu 105 Ile Gln Tyr Asn Ile Lys Gly Asp Leu Gly Gln Ala Gln Trp Leu Ile 125 115 120 Leu Val Ile Pro Ala Leu Trp Asp Ala Glu Leu Gly Gly Ser Leu Glu 135 140 Ala Arg Ser Leu Gly Pro Ala Trp Ala Arg Lys 145 150 155

<210> 3476

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3476

Met 11e Ser Val His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser 1 5 10 15

Pro Ala Leu Ala Ser Gln lle Ala Gly lle Thr Gly Met His His His 20 25 30

Ala Arg Gln Ile Phe·Ile Phe Leu Ile Glu Thr Gly Phe His His Val 35 40 45

Asp Gln Ala Gly Leu Lys Leu Leu Ala Ser Ser Tyr Leu Pro Ala Leu 50 55 60

Ala Ser Gln Ser Phe Gly 11e Thr Gly Val Ser His Arg Ala Trp Pro 65 70 75 80

Pro Leu Asn Thr Leu Lys Met Ser Gln Cys Ile Leu Val Ser Ile Phe 85 90 95

Tyr Ile Gly Lys Phe Val Val Asn Leu Ile Leu Ile Pro Val His Leu 100 105 110

Val

<210> 3477 <211> 124 <212> PRT <213> Homo sapiens <400> 3477 Met Leu Met Val Leu Phe Lys Tyr Trp Phe Val Ser Phe Gly Asp Val 10 Leu Val Phe Gln Gly Tyr Asp Cys Pro Asp Asn Gly Ser Ser Met Glu 20 25 Phe Leu Leu 11e Gly Ser Leu Pro Ser Thr Leu 11e Lys Ser 11e Phe 35 40 45 Cys Leu Phe Val Leu Arg Gln Ser Phe Ala Leu Val Ala Gln Ala Gly 55 Val Arg Trp Cys Asp Leu Gly Ser Ala Gln Pro Leu Pro Pro Gly Phe 65 70 75 Lys Leu Val Ser Cys Leu Gly Leu Pro Ser Ser Trp Asp Tyr Arg His 90 85 Ala Pro Pro Arg Leu Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe 100 105 110 Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr 115 120 <210> 3478 <211> 104 <212> PRT <213> Homo sapiens <400> 3478 Met Trp Trp Pro Leu Ala Gly Met Thr Asp Ser Glu Val Ile Thr His

10

Ser His Cys Asn Cys His Ser Val Ala Ser Phe Ser Gln Gly Gln Gly

l

Pro Gly Glu Arg Thr Gly Trp Gln Pro Ala Ala Gln Leu Glu Met Arg Ser Leu Ser Phe Ser Ser Tyr Leu Met Glu Ala Ser Gln Met Gln Asp Gly Ser Ser Arg Pro Ser 11e Thr Ser Ser Gln Cys Pro Lys Ala Arg Arg Glu Ala Val Val Phe Lys Ser Arg Lys Thr Phe Leu Asn Leu Ala Arg Ile Ala Ser Gln Thr Leu Ser <210> 3479 <211> 145 <212> PRT <213> Homo sapiens <400> 3479 Met Glu Ala Gln Ser Cys Glu Gln Glu Thr Thr Ala Arg Arg Asn Gly Gly Ala Arg Ser Leu Lys Gly Asn Ala Ala Gly Gly Val Val Lys Asp Asn The Cys Phe Gly Ala Thr Ser Gly Ala Val Thr Lys Lys Pro Ser Thr Leu Arg Lys Lys Glu Lys Phe Gly Tyr Arg Glu Thr Pro Cys Ser Lys Cys Cys Asp Ser Lys Thr Ala Gly Phe Ala Pro Leu Ala Lys Glu Pro Thr Glu Thr Pro Gly Ala Ala Thr Ala Lys Pro Ala Leu Glu Gly Leu Gly Trp Arg Lys Pro Arg Thr Glu Thr Arg Lys Leu Cys Thr Ala Arg Leu Ala Val Asp Thr Asn Arg Lys Val Ser Arg Leu Leu Ser Gly

Arg Lys Arg Gly Ser Lys Pro Ala Thr Gln Trp Arg Glu Pro Arg Ser

His <210> 3480 <211> 240 <212> PRT <213> Homo sapiens <400> 3480 Met Gly Leu His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly lle Ser Asp Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val Pro Gly Tyr Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr lle Phe Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg lle Ser His Leu Lys Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val His Gln Glu Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser Gly Ser Leu Leu Gly 11e Val Gly Cys Met Gly 11e Gly Ala Thr Val Val Leu Lys Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln Gln His Arg Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val Asn Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg Leu Ala Val Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Arg Phe Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu

Gly Asn Val Ala Thr lle Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly

Arg Ala Ser Trp Leu Tyr Lys Glu Ser Gln Phe Gly Thr Pro Arg Gly Thr Val Trp Pro His Leu Gln Val Ser Gln Gly Cys Trp Trp Pro Arg <210> 3481 <211> 164 <212> PRT <213> Homo sapiens <400> 3481 Met Leu Leu Thr Thr Leu Thr His Phe Phe Phe Phe Phe Phe Leu l Arg Gln Ser Leu Thr Leu Ser Ala Trp Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asn Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys His His Ala Arg Leu lle Phe Val Phe Leu Val Glu Met Gly Phe His His Val Gly Glu Ala Gly Leu Glu Leu Leu Thr Ser Gly Asn Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Ser Val Ser His Arg Ala Arg Pro Thr Val Phé Lys Ser Val Glu Thr Ser Phe Pro Leu Met Pro Cys Ser Arg Ala Asp Tyr Asn Ser His His Ala Trp Gln Pro Leu Gly Pro Arg Phe Arg Thr Ser Leu Thr Arg Phe Thr Ser Pro Gly 11e Leu Arg Cys Phe Pro

Asn Ser Pro Ala

<211> 127 <212> PRT <213> Homo sapiens <400> 3482 Met Pro Val Cys Pro Cys Leu His Leu Phe Phe Ser Phe Phe Phe Phe 5 10 Cys Phe Leu Arg Trp Ser Phe Ala Leu Ser Pro Arg Leu Glu Cys Ser 20 25 Gly Ala 11e Leu Ala Arg Cys Ser Leu His Leu Pro Gly Ser Ser Asp 40 45 Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys Tyr 50 55 60 His Thr Trp Leu Ile Leu Val Phe Leu Ile Glu Thr Gly Phe His His 70 75 Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Pro Ala 85 90 Leu Ala Ser Gln Ser Val Gly Ile Thr Gly Leu Ser His Pro Ala Arg 100 105 Pro Asn Ala Ser lle Leu Phe Leu Asp Ala Phe His Ser Lys Trp 115 120 125 <210> 3483 <211> 165 <212> PRT <213> Homo sapiens <400> 3483 Met Ser His Val lle Trp Thr Leu Lys Met Glu Cys Ser Glu Thr His 10

Val Gln Gly Ser Cys Ala Lys Leu Met Ser Arg Thr Gly Leu Leu Met

Lys Leu Leu Ser Glu Gln Gln Glu Ala Lys Ala Leu Asn Val Glu Trp

25

30

20

<210> 3482

Asp Thr Asp Gln Gln Lys Thr Asn Tyr Ile Asn Glu Asn Met Glu Gln Asn Glu Gln Lys Glu Gln Lys Ser Ser Glu Leu Met Lys Glu Val Pro Gly Tyr Asp Tyr Lys Asn Lys Leu Ile Phe Ala Ile Ser Val Thr Val Ile Leu Ile Ile Leu Ile Ile Ile Phe Cys Phe Ile Glu Val Lys Thr Ile Ile Asn Ser Gly Phe Gln Asn Thr Ile Leu Cys Leu Cys Gly Phe Arg Ile His Lys Leu Lys Thr Asn Val Thr Phe Pro Leu Asp Ile Leu Leu Leu Ser Phe Lys Ala Glu Val Cys Phe Val Leu Leu Leu Gln Cys lle Phe Gln Asp Cys <210> 3484 <211> 405 <212> PRT <213> Homo sapiens <400> 3484 Met Ser Ser Val Lys Thr Pro Ala Leu Glu Glu Leu Val Pro Gly Ser Glu Glu Lys Pro Lys Gly Arg Ser Pro Leu Ser Trp Gly Ser Leu Phe Gly His Arg Ser Glu Lys Ile Val Phe Ala Lys Ser Asp Gly Gly Thr Asp Glu Asn Val Leu Thr Val Thr Ile Thr Glu Thr Thr Val Ile Glu Ser Asp Leu Gly Val Trp Ser Ser Arg Ala Leu Leu Tyr Leu Thr

Leu Trp Phe Phe Phe Ser Phe Cys Thr Leu Phe Leu Asn Lys Tyr 11e

				85					90					95	
Leu	Ser	Leu	Leu	Gly	Gly	Glu	Pro	Ser	Met	Leu	Gly	Ala	Val	Gln	Met
			100					105					110		
Leu	Ser	Thr	Thr	Val	He	Gly	Cys	Val	Lys	Thr	Leu	Val	Pro	Cys	Cys
		115					120					125			
Leu	Tyr	Gln	His	Lys	Ala	Arg	Leu	Ser	Tyr	Pro	Pro	Asn	Phe	Leu	Met
	130					135					140				
Thr	Met	Leu	Phe	Val	Gly	Leu	Met	Arg	Phe	Ala	Thr	Val	Val	Leu	Gly
145					150					155					160
Leu	Val	Ser	Leu	Lys	Asn	Val	Ala	Val	Ser	Phe	Ala	Glu	Thr	Val	Lys
			,	165					170					175	
Ser	Ser	Ala	Pro	11e	Phe	Thr	Va]	He	Met	Ser	Arg	Met	Пе	Leu	Gly
			180					185					190		
Glu	Tyr	Thr	Gly	Leu	Leu	Val	Asn	Leu	Ser	Leu	He	Pro	Val	Met	Gly
		195					200					205		•	
Gly	Leu	Ala	Leu	Cys	Thr	Ala	Thr	Glu	He	Ser	Phe	Asn	Val	Leu	Gly
	210					215					220				
Phe	Ser	Ala	Ala	Leu	Ser	Thr	Asn	Пe	Met	Asp	Cys	Leu	Gln	Asn	Val
225					230					235					240
Phe	Ser	Lys	Lys	Leu	Leu	Ser	Gly	Asp	Lys	Tyr	Arg	Phe	Ser	Ala	Pro
				245					250					255	
Glu	Leu	Gln		Tyr	Thr	Ser	Ala		Ala	Val	Ala	Met		Val	Pro
			260					265					270		
Ala	Arg		Phe	Phe	Thr	Asp		Pro	Val	He	Gly	_	Ser	G1 y	Lys
_		275					280			-		285			
Ser		Ser	Tyr	Asn	GIn	Asp	Val	Val	Leu	Leu		Leu	Thr	Asp	G1y
	290	D1			0.1	295	7.1	Tr.		m	300			6.1	
	Leu	Phe	HIS	Leu		Ser	He	Ihr	Ala		Ala	Leu	Met	Gly	
305	C	n	v i	T)	310	C	A: 1		C	315	17 1		11.	4.1	320
11e	Ser	Pro	vai		Pne	Ser	val	Ala		Inr	vai	Lys	HIS		Leu
C	11.	Т	Lau	325	Val	11.	V a 1	Dl	330	Aan	Lua	11	Thus	335	Lau
261.	116	rrp		ser	vai	lle	vai		61 y	ASII	Lys	116		261.	Leu
			340					345					350		
Sor	АТа	Val	G1 _v	The	Λ1ο	Leu	Val	The	Val	Glv	Val	Lov	Lov	Tyr	Acn
ુલ1	VIG	355	ОТУ	1 11.1	HIG	Leu	360	1111	, 01	Oly	, a 1	265	ьси	1 y 1	11.511

 Lys
 Ala
 Arg
 Gln
 His
 Gln
 Gln
 Glu
 Ala
 Leu
 Gln
 Ser
 Leu
 Ala
 Ala
 Ala

 370
 375
 380
 380

 Thr
 Gly
 Arg
 Ala
 Pro
 Asp
 Thr
 Val
 Glu
 Pro
 Leu
 Pro
 Arg
 Asp

 385
 390
 395
 395
 400

 Pro
 Arg
 Gln
 His
 Pro

 405

<210> 3485 <211> 126 <212> PRT

<213> Homo sapiens

<400> 3485

Leu Ser Gly Asn Phe Ser Phe Thr Leu Thr Leu Ala Leu Pro Pro Ser

<210> 3486

⟨211⟩ 329

<212> PRT

<213> Homo sapiens

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Met	Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala	Leu	Phe	Ser
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Val	Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Glu	Leu	Phe	Pro
			20					25					30		
Val	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala	Leu	Leu	Pro	Ala	Leu	Phe	His
		35					40					45			
Met	Leu	Phe	${\rm Pro}$	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala	Leu	Phe	Ser
	50					55					60				
Ala	Pro	Phe	Pro	Met	Arg	Ser	Leu	His	Cys	Ser	Pro	Arg	Cys	Ser	Pro
65					70					75					80
Cys	Cys	Ser	Pro	Arg	Cys	Ser	Pro	Cys	Cys	Ser	Leu	His	Cys	Ser	Pro
				85					90					95	
Cys	Cys	Ser	Leu	Gln	Cys	Ser	Leu	His	Cys	Ser	Pro	His	Cys	Ser	Leu
			100					105					110		
His	Cys	Ser	Pro	Cys	Cys	Phe	Leu	His	Tyr	Ser	Pro	Cys	Cys	Ser	Leu
		115					120					125			
His	Phe	Ser	Leu	Cys	Arg	Ser	Pro	Cys	He	Pro	Cys	Thr	Val	Pro	Cys
	130					135					140				
Thr	Val	Pro	His	Ala	Val	Pro	Cys	Asn	Ala	Pro	Cys	Thr	Val	Pro	Arg
145					150					155					160
Thr	Ala	Pro	Cys	Thr	He	Pro	His	Ala	Val	Pro	Cys	Thr	Phe	Leu	Cys
				165					170					175	
Ala	Val	Pro	His	Ala	Phe	Pro	Ala	Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met
			180					185					190		
Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala		Phe	Pro	Met
		195				_	200			_		205			
Leu		Pro	Ala	Gly	Phe	Pro	Ala	Leu	Phe	Pro		Leu	Phe	Pro	Ala
	210					215					220				
	Phe	Pro	Met	Leu		Pro	Ala	G] y	Phe		Ala	Leu	Phe	Pro	
225					230					235			_		240
Leu	Phe	Pro	Ala		Phe	Met	Pro	Gln		Phe	Pro	Phe	Ser		Gln
				245			_		250	_				255	
His	Thr	Gly	Ser	Ser	Phe	Lys	Ser	Phe	Cys	Ser	Val	Ser	Asn	His	Ser

Ser Ala Gly Thr Gly Trp Gly Gln Asp Gly Val Arg Pro Cys Arg Pro Trp Pro Ser Arg Ser Val Pro Leu Arg Arg Leu Pro Gln Arg His Gly Arg Leu Leu Lys Ala Thr Glu Arg Ser Thr Cys Trp Thr Pro Thr Thr Arg Ala Thr Pro Ser Cys Gly Cys Pro <210> 3487 <211> 163 <212> PRT <213> Homo sapiens <400> 3487 Met Ile Glu Ile Leu Asn Lys Ser Lys Asn Cys Glu Gly Phe Ser Glu Arg Arg Thr Gly Arg Gly Ile Trp Thr Trp Val Cys Met His Arg Pro Gly Cys Ser Arg Val Ala Asp Gln Gln His Leu Glu Asp Phe Thr Glu Cys Phe Cys His Leu His Pro Ser Trp Pro Arg Pro Ala Leu Phe Pro Leu Leu Gln Leu Ile Phe Pro Asp Leu Val Glu Gly Leu Val Leu Val Asn Ile Asp Pro Asn Gly Lys Gly Trp Ile Asp Trp Ala Ala Thr Lys Leu Ser Gly Leu Thr Ser Thr Leu Pro Asp Thr Val Leu Ser His Leu Phe Ser Gln Glu Glu Leu Val Asn Asn Thr Glu Leu Val Gln Ser

Tyr Arg Gln Gln Ile Gly Asn Val Val Asn Gln Ala Asn Leu Gln Leu

Phe Trp Asn Met Tyr Asn Ser His Phe Pro Gly Ala Leu Trp Ala Gln

145 150 155 160 Leu Val Leu <210> 3488 <211> 109 <212> PRT <213> Homo sapiens <400> 3488 Met Asn Gly Arg Leu Ser Lys Glu Asp Val Tyr Ala Ala Ser Lys His 1 5 10 Glu Lys Ser Ser Ser Ser Leu Phe Ile Arg Glu Met Gln Ile Lys Thr 20 25 30 Ala Met Arg Tyr His Leu Met Pro Val Arg Met Val Val Ile Lys Lys 40 Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu 50 55 Leu His Cys Trp Trp Glu Gly Lys Leu Val Gln Pro Leu Trp Lys Thr 70 75 Val Trp Gln Phe Thr Lys Asp Leu Val Leu Glu lle Pro Phe Asp Pro 85 90 95 Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys 100 105 <210> 3489 <211> 111 <212> PRT <213> Homo sapiens <400> 3489 Met Glu Lys Asn Ile Ser Leu Tyr Glu Tyr Thr Thr Phe Cys Leu Ser

10

lle Tyr Pro Leu IIe Gly Cys Phe Tyr Phe Phe Leu Ala Ile Met Asn

15

5

Asn Ile Ala Val Asn Ile Cys Val Gln Gly Phe Ser Gly His Lys Phe Leu Phe Phe Leu Gly Ile Tyr Leu Gly Val Glu Leu Leu Gly His Ile Val 11e Leu Phe Asn Phe Leu Lys Asn Phe Pro Thr Val Leu His Gly Gly Cys Ala Ile Val Tyr Ser Tyr Gln Gln Cys Met Lys Leu Gln Ile Ser Pro His Pro Glu Asn Pro Phe Ile Ile Phe Cys Phe Ser Phe <210> 3490 <211> 199 <212> PRT <213> Homo sapiens <400> 3490 Met Val Ser Arg Pro Pro Arg Thr Pro Leu Ser Pro Ser Ser Trp Thr Pro Ala Met Gly Leu Arg Ala Ser Arg Asn Cys Ser Arg Thr Glu Asn Ala Val Cys Gly Cys Ser Pro Gly His Phe Cys lle Val Gln Asp Gly Asp His Cys Ala Ala Cvs Arg Ala Tyr Ala Thr Ser Ser Pro Gly Gln Arg Val Gln Lys Gly Gly Thr Glu Ser Gln Asp Thr Leu Cys Gln Asn Cys Pro Pro Gly Thr Phe Ser Pro Asn Gly Thr Leu Glu Glu Cys Gln His Gln Thr Lys Cys Ser Trp Leu Val Thr Lys Ala Gly Ala Gly Thr Ser Ser Ser His Trp Val Trp Trp Phe Leu Ser Gly Ser Leu Val Ile

Val Ile Val Cys Ser Thr Val Gly Leu Ile Ile Cys Val Lys Arg Arg 130 135 140 Lys Pro Arg Gly Asp Val Val Lys Val Ile Val Ser Val Gln Arg Lys 150 155 160 145 Arg Gln Glu Ala Glu Gly Glu Ala Thr Val Ile Glu Ala Leu Gln Ala 170 165 Pro Pro Asp Val Thr Thr Val Ala Val Glu Glu Thr Ile Pro Ser Phe 190 185 Thr Gly Arg Ser Pro Asn His 195

<210> 3491

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3491

Met Arg Lys Glu Lys Gln Ser Lys Ser Leu Leu Tyr Leu Leu Lys Ile 5 10 Ser Ser Leu Phe Ser Ser Thr Leu Phe His Gln His Leu Pro Ala Gln 20 25 Asn Phe His Asn Asp Pro Ile Leu Lys Pro Asn Ser Val Ser Arg Leu 35 40 45 Leu Thr Ser Thr 11e Ala Arg Thr His Glu Asn Leu Leu 11e Gln Ala His Ala Met Ala Gln Ala His Ala Glu Gln Ala Pro Leu Thr Pro Leu 70 75 80 Leu Leu Pro Ser Ala Ser Thr Ala Leu Leu Asn Arg His Val Asn Thr 85 90 95

Gly Pro Phe Met His Arg Ser Lys Gly Ser Leu Arg Pro Lys Ala Leu 100 105 110

Cys Thr Thr Leu Cys Asp Ser Leu 115 120

<210> 3492 <211> 107 <212> PRT <213> Homo sapiens <400> 3492 Met Val Ser Ala Ala Leu Ile Ser Gln Ser Leu Pro Arg Ser Pro His 10 Ser Arg Ser Pro Pro Leu Ala Arg Ser Arg Arg Leu Pro Thr Pro Arg 20 25 30 Ser Arg Pro Leu Arg Pro Ser Phe Leu Pro His Pro Ser Pro Arg Pro 40 Arg Asn Trp Pro Gly Pro Ser Lys Cys Arg Pro Arg Ser Arg Leu Gln 50 55 Asn Phe Leu Lys Leu Ser Asn Ser Lys His Pro Trp Pro Ala Ser Ser 70 75 Lys Leu Pro Leu Leu Pro Ser Arg Leu Leu His Arg Leu Trp Arg Ser 85 90 95 Arg Arg Arg Arg Pro Gly Ser Arg Cys Arg 100 105 <210> 3493 <211> 117 <212> PRT <213> Homo sapiens <400> 3493 Met His Leu Leu Leu Ser Ser Ser Tyr Leu Asn Leu Leu Gln Arg l 5 10 15 Met Leu Trp Arg Leu Pro Trp Leu Ser His Val Ile His Lys Glu His 25 Ala Thr Thr Ile Gln Phe Leu Gln Pro Arg Gly Arg Glu Gln Gln Tyr 35 40 45 Leu Cys Arg Arg Arg His Ser Glu Leu Pro Ser Ala Ser Arg Asn Gln

55

60

<210> 3494

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3494

Met Cys Val Cys Cys Phe lle Phe Leu Met Leu Cys Leu Gly Arg Glu

1 5 10 15

Cys Ser Tyr Ile Tyr Val Tyr Ile Leu Tyr Ser Pro Ile Trp Glu Ser 20 25 30

Arg Ser Glu Val Ile Ala Ser Ser Asp Cys Phe Ser Ser Glu Val Gly
35 40 45

Tyr His Trp Phe Thr Cys Leu Tyr Leu Asn Val Leu Pro Ser Val Glu 50 55 60

Ser Pro Ala Cys Gly Glu Glu Ser Leu Leu Val Met Phe Leu Phe Ser
65 70 75 80

Val Phe Met Gly Glu Phe Ile Gln Met Phe Tyr Leu Phe Gln Ser Thr
85 90 95

Leu Asp Cys Ala Glu Met Ser Ser Ser Val Ala Gl
n Glu Lys Ala 100 \$105\$ 110

<210> 3495

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3495 Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr 10 Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys 25 Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly 40 45 Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser 50 55 60 Arg Tyr Cys Pro Arg Ala Pro Thr Leu Ser Cys His Pro His Ser Leu 70 75 His Thr Trp Gln Glu Gly Asp Ala Lys Pro Cys Val Leu Thr Gln Ala 90 85 Arg Ser Cys Leu Leu Elu Gly Gly Glu Gly Cys Asp Arg Ala Ala Cys 105 Pro Gly Pro Gly Ala Arg Gly Arg Arg Ser Cys Arg Trp Pro Gly Gly 120 Met Glu Asn Met Pro Gln Glu Arg Ala Phe Asp Leu Ser Leu Ser Leu 140 130 135 Ala Cys Gln Trp Gly Lys Gln Arg Gly Val Gln Val Glu Gly Pro Lys 150 155 160 Asp Lys Ala Val Leu Gly Lys Pro 165

<210> 3496

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3496

Met Asp Ser Ser Tyr Leu Asp Asn Gln Gly Ile Ala Pro Ser Lys Lys

1 5 10 15

Pro Met Pro Ser Tyr Lys Cys Gln Ser His Trp Ala Asn Gln Gln Thr
20 25 30

Leu Ser Gln Arg Ala Pro Leu Gly Phe Thr Gly Gln Trp Thr Asn Gln Arg Arg Phe Gln Ser Ala Ser His Cys Gly Thr Ala Arg His Ser Leu 50 55 Cys Pro Ala Arg Ser Gly Thr Phe Leu Asp Pro Val Ser Ser Ile Ile Leu Asp Cys Gln Leu Pro Glu Val Arg Lys Leu Ile Phe Tyr Phe Phe 90 Ser Leu Arg Leu Leu Asn Leu Phe Gln Leu His Leu Ser Thr Glu Leu 100 105 110 Ser Ser Tyr Gln Val Leu Arg His Ile Asn Asp Ala Asn Leu Val Pro 120 125 Phe Leu Val Trp Pro Asn Ser Lys Val Glu Glu Leu Gly Asn Lys Ser 130 135 140

<210> 3497

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3497

Met Lys Leu Ser Val Asn Glu Ala Gln Leu Gly Phe Tyr Leu Gly Ser

1 5 10 15

Leu Ser His Leu Ser Ala Cys Pro Gly Ile Asp Pro Arg Ser Ser Glu 20 25 30

Asp Gln Pro Glu Ser Leu Lys Thr Gly Gln Met Met Asp Glu Ser Asp
35 40 45

Glu Asp Phe Lys Glu Leu Cys Ala Ser Phe Phe Gln Arg Val Lys Lys
50 55 60

His Gly 11e Lys Glu Val Ser Gly Glu Arg Lys Thr Gln Lys Ala Ala
65 70 75 80

Ser Asn Gly Thr Gln lle Arg Ser Lys Leu Lys Arg Thr Lys Gln Thr 85 90 95

Ala Thr Lys Thr Lys Thr Leu Gln Gly Pro Ala Glu Lys Lys Pro Pro 100 105 110

Ser	Gly	Ser	Gln	Ala	Pro	Arg	Thr	Lys	Lys	Gln	Arg	Val	Thr	Lys	Trp
		115					120					125			
Gln	Ala	Ser	Glu	Pro	Ala	His	Ser	Val	Asn	Gly	Glu	Gly	Gly	Val	Leu
	130					135					140				
Ala	Ser	Ala	Pro	Asp	Pro	Pro	Val	Leu	Arg	Glu	Thr	Ala	Gln	Asn	Thr
145					150					155					160
G1n	Thr	Gly	Asn	Gln	G1n	G1u	Pro	Ser	Pro	Asn	Leu	Ser	Arg	Glu	Lys
				165					170					175	
Thr	Arg	Glu	Asn	Val	Pro	Asn	Ser	Asp	Ser	Gln	Pro	Pro	Pro	Ser	Cys
			180					185					190		
Leu	Thr	Thr	Ala	Val	Pro	Ser	Pro	Ser	Lys	Pro	Arg	Thr	Ala	Gln	Leu
		195					200					205			
Val	Leu	Gln	Arg	Met	Gln	Gln	Phe	Lys	Arg	Ala	Asp	Pro	Glu	Arg	Leu
	210					215					220				
Arg	His	Ala	Ser	Glu	G] u	Cys	Ser	Leu	Glu	Ala	Ala	Arg	Glu	Glu	Asn
225					230					235					240
Val	Pro	Lys	Asp	Pro	Gln	Glu	Glu	Met	Met	Ala	Gly	Asn	Val	Tyr	Gly
				245					250					255	
Leu	Gly	Pro	Pro	Ala	Pro	Glu	Ser	Asp	Ala	Ala	Val	Ala	Leu	Thr	Leu
			260					265					270		
Gln	Gln	Glu	Phe	Ala	Arg	Val	Gly	Ala	Ser	Ala	His	Asp	Asp	Ser	Leu
		275					280					285			
Glu	Glu	Lys	Gly	Leu	Phe	Phe	Cys	Gln	He	Cys	Gln	Lys	Asn	Leu	Şer
	290					295					300				
Ala	Met	Asn	Val	Thr	Arg	Arg	Glu	Gln	His	Val	Asn	Arg	Trp	Gly	Gln
305					310					315					320
Leu	Gly	Pro	Ser	Pro	Leu	Pro	Cys	Met							
				325											

<210≻ 3498

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3498

Met Arg Gly Gly Gly Ser Ser Gly Glu 11e Gly Cys Phe Leu Leu Ser Phe Ser Glu Lys Phe Leu Glu Arg Trp Ser Gln Arg Asp Ala Gly Gly 20 Trp Gly Ala Pro Gly Ser Lys Arg Leu Lys Glu Ser Glu Lys Thr Gln 40 45 Ala His Arg Asp Thr Ser Asn Leu Arg Ala Thr Ala Gln Ala Glu Pro 50 55 60 Lys Ala Thr Glu Thr Leu Thr Pro Glu Lys Lys His Arg Asp Arg Gly 70 75 65 Ser Arg Ser Ser Leu Cys His Cys Ser Ala Pro Glu Thr Pro Gln His 90 Gly Glu Arg Ala Gly Gly Ser His Glu Lys Pro Arg Ala Leu Thr Gly 100 105 110 Leu Leu Arg Gly Gly Arg Lys Ala Glu Thr Arg Pro Leu Glu Pro Pro 120 Val Arg Thr Gly Pro Val Glu Trp Ala Gln Tyr Val Arg Thr Gln Arg 135 140 Gly Arg Gln Ser Ile Gly Trp Gly Arg Leu Ser Leu Ile Phe Pro Arg 150 155 160 145 Phe Ser Leu Leu Ser Gly Ser Val Val Leu Ser Pro Pro Ile Phe Thr 165 170 Leu Val Ala

<210> 3499

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3499

Met Thr Arg Ala Arg 11e Gly Cys Phe Gly Pro Gly Gly Arg Ala Arg

1 5 10 15

Gly Thr Glu Ser Ala Pro Glu Pro Ser Lys Arg Val Pro Pro Gly Arg

20 25 30

Ser	Trp	Gln	Thr	Gln	Glu	Val	Arg	Gln	Thr	Arg	Gly	Ala	Asn	Gly	Leu
		35					40					45			
Gly	Pro	Arg	Ala	Gly	Ser	Ala	Gly	Ala	Lys	Ala	Pro	Gly	Pro	Ala	Gln
	50					55					60				
Gly	Ala	Ala	Gln	His	Gly	Leu	Gly	Gly	Ser	Ala	Gly	Leu	Arg	Val	Arg
65					70					75					80
Val	Ser	Pro	Leu	Ala	Met	Gly	Ser	Ala	Ala	Leu	Glu	He	Leu	Gly	Leu
				85					90					95	
Val	Leu	Cys	Leu	Val	Gly	Trp	Gly	Gly	Leu	Ile	Leu	Ala	Cys	Gly	Leu
			100					105					110		
Pro	Met	Trp	Gln	Va]	Thr	Ala	Phe	Leu	Asp	His	Asn	lle	Val	Thr	Ala
		115					120					125			
Gln	Thr	Thr	Trp	Lys	Gly	Leu	Trp	Met	Ser	Cys	Val	Val	Gln	Ser	Thr
	130					135					140				
Gly	His	Met	Gln	Cys	Lys	Val	Tyr	Asp	Ser	Val	Leu	Ala	Leu	Ser	Thr
145					150					155					160
Glu	Val	Gln	Ala	Ala	Arg	Ala	Leu	Thr	Val	Ser	Ala	Val	Leu	Leu	Ala
				165					170					175	
Phe	Val	Ala	Leu	Phe	Val	Thr	Leu	Ala	Gly	Ala	Gln	Cys	Thr	Thr	Cys
			180					185					190		
Val	Ala	Pro	G1 y	Pro	Ala	Lys	Ala	Arg	Val	Лlа	Leu	Thr	Gly	Gly	Val
		195					200					205			
Leu	Tyr	Leu	Phe	Cys	Gly	Leu	Leu	Ala	Leu	Va]	Pro	Leu	Cys	Trp	Phe
	210					215					220				
Ala	Asn	lle	Val	Val	Arg	Glu	Phe	Tyr	Asp	Pro	Ser	Val	Pro	Val	Ser
225					230					235					240
Gln	Lys	Tyr	Glu	Leu	Gly	Ala	Ala	Leu		He	Gly	Trp	Ala		Thr
				245					250					255	
Ala	Leu	Leu		Val	G1y	Gly	Cys		Leu	Cys	Cys	Gly		Trp	Val
			260					265					270		
Cys	Thr		Arg	Pro	Asp	Leu		Phe	Pro	Va]	Lys		Ser	Ala	Pro
		275					280					285			
Arg	_	Pro	Thr	Ala	Thr	Gly	Asp	Tyr	Asp	Lys	Lys	Asn	Tyr	Va]	
	290					295					300				

<210> 3500 <211> 116 <212> PRT <213> Homo sapiens <400> 3500 Met Arg Asn Leu Gln Ser Ser lle Gln Asn Trp Arg Arg His Thr Gln 10 Thr Thr Leu Gln Gly Arg Leu Ala Ala Glu Ala Gly Pro Met Lys Lys 30 20 25 Met Met Lys Lys Thr Met Arg Met Tyr His Val Tyr Tyr Trp Pro Gln 40 Thr Thr Ser Pro Leu Pro Arg Val Ala His Arg Lys Gln Pro Ala Pro 50 55 Phe Phe Phe Leu Phe Ser Pro Thr Thr His His Pro Ser Leu Gln Thr 70 75 Leu Pro Pro Thr Arg Leu Gly Cys Arg Val Cys Glu Ala Ala Gln Lys 90 Val Cys Lys Ser Pro Leu Cys Leu Ile Cys Val Phe Pro Arg Lys Arg 100 105 110 Ala Gly Ser Leu 115 <210> 3501 <211> 114 <212> PRT <213> Homo sapiens <400> 3501 Met Phe His His Gln Gln Ala Tyr Cys Leu Ala Pro Phe Asp Leu Ile 10 Lys Val Arg Leu Gln Asn Gln Thr Glu Pro Arg Ala Gln Pro Gly Ser 20 25 30

Pro Pro Pro Arg Tyr Gln Gly Pro Val His Cys Ala Ala Ser lle Phe

45

40

Arg Glu Glu Gly Pro Arg Gly Leu Phe Arg Gly Ala Trp Ala Leu Thr 55 Leu Arg Asp Thr Pro Thr Val Gly lle Tyr Phe lle Thr Tyr Glu Gly ' 70 65 75 Leu Cys Arg Gln Tyr Thr Pro Glu Gly Gln Asn Pro Ser Ser Ala Thr 90 Val Leu Trp Gln Gly Ala Leu Gln Ala Leu Leu Pro Gly Trp Gln Pro 105

Arg Pro

<210> 3502

<211> 148

<212> PRT

<213> Homo sapiens

130

<400> 3502 Met Ala Gly Thr Leu Asp Leu Asp Lys Gly Cys Thr Val Glu Glu Leu 1 5 10 15 Leu Arg Gly Cys lle Glu Ala Phe Asp Asp Ser Gly Lys Val Arg Asp 25 Pro Gln Leu Val Arg Met Phe Leu Met Met His Pro Trp Tyr 11e Pro 45 Ser Ser Gln Leu Ala Ala Lys Leu Leu His 11e Tyr Gln Gln Ser Arg 55 Lys Asp Asn Ser Asn Ser Leu Gln Val Lys Thr Cys His Leu Val Arg 70 75 Tyr Trp Ile Ser Ala Phe Pro Ala Glu Phe Asp Leu Asn Pro Glu Leu 85 90 95 Ala Glu Gln Ile Lys Glu Leu Lys Ala Leu Leu Asp Gln Glu Gly Asn 105 Arg Arg His Ser Ser Leu lle Asp lle Asp Ser Val Cys Val Gly Gly 125 115 120

Ala Gln Arg Ala Gly Gly Ala Leu Ser Ile Leu Tyr His Leu Cys Leu

140

Ile Asn Val Cys 145

<210> 3503

<211> 599

<212> PRT

<213> Homo sapiens

<400> 3503

Met Glu His Phe Leu Leu Glu Val Ala Ala Ala Pro Leu Arg Leu Ile 1 5 10 15

Ala Ala Lys Asn Glu Lys Ser Arg Ser Glu Leu Gly Arg Phe Leu Ala 20 25 30

Lys Gln Val Trp Thr Pro Gln Asp Arg Gln Cys Val Leu Ser Thr Leu 35 40 45

Ala Gln Leu Leu Leu Asp Lys Asp Cys Thr Val Leu Val Gly Arg Gln 50 55 60

Leu Arg Pro Leu Leu Leu Asp Leu Leu Glu Arg Asn Ala Glu Ala 11e 65 70 75 80

Lys Ala Gly Gly Gln Ile Asn His Asp Leu His Glu Arg Leu Cys Val 85 90 95

Ser Met Ser Lys Leu Ile Gly Asn His Pro Asp Val Leu Pro Phe Ala 100 105 110

Leu Arg Tyr Phe Lys Asp Thr Ser Pro Val Phe Gln Arg Leu Phe Leu 115 120 125

Glu Ser Ser Asp Ala Asn Pro Val Arg Tyr Gly Arg Arg Met Lys 130 135 140

Leu Arg Asp Leu Met Glu Ala Ala Phe Lys Phe Leu Gln Gln Gln Gln 145 150 155 160

Ser Val Phe Arg Glu Leu Trp Asp Trp Ser Val Cys Val Pro Leu Leu 165 170 175

Arg Ser His Asp Thr Leu Val Arg Trp Tyr Thr Ala Asn Cys Leu Ala 180 185 190

Leu Val Thr Cys Met Asn Glu Glu His Lys Leu Ser Phe Leu Lys Lys 195 200 205

He	Phe	Asn	Ser	Asp	Glu	Leu	He	His	Phe	Arg	Leu	Arg	Leu	Leu	Glu
	210					215					220				
Glu	Ala	Gln	Leu	Gln	Asp	Leu	Glu	Lys	Ala	Leu	Val	Leu	Ala	Asn	Pro
225					230					235					240
Glu	Val	Ser	Leu	Trp	Arg	Lys	Gln	Lys	Glu	Leu	Gln	Tyr	Leu	Gln	Gly
				245					250					255	
His	Leu	Val	Ser	Ser	Asp	Leu	Ser	Pro	Arg	Val	Thr	Ala	Val	Cys	Gly
			260					265					270		
Val	Val	Leu	Pro	Gly	Gln	Leu	Pro	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Asn
		275					280					285			
Arg	Ser	Ser	Ser	Arg	Glu	Gln	Glu	Leu	Ala	Leu	Arg	Ser	Tyr	Val	Leu
	290					295					300				
Val	Glu	Ser	Val	Cys	Lys	Ser	Leu	Gln	Thr	Leu	Ala	Met	Ala	Val	Ala
305					310					315					320
Ser	Gln	Asn	Ala	Val	Leu	Leu	Glu	Gly	Pro	lle	Gly	Cys	Gly	Lys	Thr
				325					330					335	
Ser	Leu	Val	Glu	Tyr	Leu	Ala	Ala	Val	Thr	Gly	Arg	Thr	Lys	Pro	Pro
			340					345					350		
Gln	Leu	Leu	Lys	Val	Gln	Leu	Gly	Asp	Gln	Thr	Asp	Ser	Lys	Met	Leu
		355					360					365			
Leu	Gly	Met	Tyr	Arg	Cys	Thr	Asp	Val	Pro	Gly	Glu	Phe	Val	Trp	Gln
	370					375					380				
Pro	Gly	Thr	Leu	Thr	G1n	Ala	Ala	Thr	Met	Gly	His	Trp	lle	Leu	Leu
385					390					395					400
Glu	Asp	lle	Asp	Tyr	Ala	Pro	Leu	Asp	Val	Va]	Ser	Val	Leu	He	Pro
				405					410					415	
Leu	Leu	Glu	Asn	Gly	Glu	Leu	Leu	lle	Pro	G] y	Arg	Gly	Asp	Cys	Leu
			420					425					430		
Lys	Val	Ala	Pro	Gly	Phe	Gln	Phe	Phe	Ala	Thr	Arg	Arg	Leu	Leu	Ser
		435					440					445			
Cys	Gly	Gly	Asn	Trp	Tyr	Arg	Pro	Leu	Asn	Ser	His	Ala	Thr	Leu	Leu
	450					455					460				
Asp	Lys	Tyr	Trp	Thr	Lys	He	His	Leu	Asp	Asn	Leu	Asp	Lys	Arg	G] u
465					470					475					480
Leu	Asn	Glu	Val	Leu	G1n	Ser	Arg	Tyr	Pro	Ser	Leu	Leu	Ala	Val	Val
				485					490					495	

Asp His Leu Leu Asp Ile Tyr Ile Gln Leu Thr Gly Glu Lys His His Ser Trp Ser Asp Ser Ser Val Gly Cys Glu Gln Ala Pro Glu Glu Val Ser Glu Ala Arg Arg Glu Asn Lys Arg Pro Thr Leu Glu Gly Arg Glu Leu Ser Leu Arg Tyr Trp Thr Lys Gln Phe Phe Leu Phe Phe Leu Ser Phe Phe Phe Val Arg Gln Ile Pro Ala Leu Leu Pro Arg Leu Glu Cys Ser Gly Ala Val Leu Ala His Ser Asn Leu Arg Leu Leu Gly Ser Lys Phe Leu Pro Ala Arg Ser Lys

<210> 3504

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3504

Met Ser Ser Glu Glu Ser Gly Thr Ser Ile Ser Leu Leu Pro Ala Leu Ser Leu Ala Ala Pro Asp Pro Gly Gln Arg Ser Ser Ser Gln Pro Ser Pro Ala Ile Cys Ser Ala Pro Ala Thr Leu Thr Pro Arg Ser Pro His Ala Ser Arg Thr Pro Ser Ser Pro Leu Gln Ser Cys Thr Pro Ser Leu Ser Pro Arg Ser His Val Pro Ser Pro His Gln Ala Leu Val Thr Arg Pro Gln Lys Pro Ser Leu Glu Phe Lys Glu Phe Val Gly Leu Pro Cys Lys Asn Arg Pro Pro Phe Pro Arg Thr Gly Ala Thr Arg Gly Ala Gln

<210> 3505

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3505

Met Ser His Thr Ser His Leu Thr Leu Lys lle Cys Val lle His Arg 1 5 10 15

Pro Thr Leu Arg Tyr Leu Thr Leu Ile Ala Tyr Arg Gln His Val Arg
20 25 30

Ala Pro Arg Gly Arg Cys Ser His Pro Asp Lys Lys Ser Ala Ala Leu $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$

Val Leu Arg Ile Leu Phe Pro Arg Thr Glu Ala Leu Pro Ser Thr Ile 50 55 60

Ser Leu Ala Leu Ala Glu Ser Ser Pro Ile Ala Ser Leu Ser Ser 65 70 75 80

Thr Ser His Ala Ala Leu Arg Pro Gln Gly Asp Gly Gly Arg Gly Val
85 90 95

Glu Thr Arg Met Glu Trp Asn Ile Phe lle Lys 100 105

<210> 3506

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3506

Met	Leu	Trp	Leu	Phe	Gln	Ser	Leu	Leu	Phe	Val	Phe	Cys	Phe	Gly	Pro
1				5					10					15	
Gly	Asn	Val	Val	Ser	Gln	Ser	Ser	Leu	Thr	Pro	Leu	Met	Val	Asn	Gly
			20					25					30		
He	Leu	Gly	G1u	Ser	Val	Thr	Leu	Pro	Leu	Glu	Phe	Pro	Ala	G1 y	Glu
		35					40					45			
Lys	Val 50	Asn	Phe	He	Thr	Trp 55	Leu	Phe	Asn	Glu	Thr 60	Ser	Leu	Ala	Phe
Ile	Val	Pro	His	Glu	Thr	Lys	Ser	Pro	Glu	Ile	His	Val	Thr	Asn	Pro
65					70					75					80
Lys	G1n	G1y	Lys	Arg 85	Leu	Asn	Phe	Thr	G1n 90	Ser	Tyr	Ser	Leu	G1n 95	Leu
Ser	Asn	Leu	Lys	Met	Glu	Asp	Thr	Gly	Ser	Tyr	Arg	Ala	Gln	Пе	Ser
			100					105					110		
Thr	Lys	Thr	Ser	Ala	Lys	Leu	Ser	Ser	Tyr	Thr	Leu	Arg	He	Leu	Arg
		115					120					125			
Gln	Leu	Arg	Asn	lle	Gln	Val	Thr	Asn	His	Ser	Gln	Leu	Phe	Gln	Asn
	130					135					140				
Met	Thr	Cys	Glu	Leu	His	Leu	Thr	Cys	Ser	Val	Glu	Asp	Ala	Asp	Asp
145					150					155					160
Asn	Val	Ser	Phe		Trp	G1u	Ala	Leu		Asn	Thr	Leu	Ser		Gln
			an i	165				15	170			6	6.1	175	
Pro	Asn	Leu		Val	Ser	Trp	Asp		Arg	He	Ser	Ser		GIn	Asp
т	Tha	Cua	180	A10	C1	Aan	110	185	Con	Aon	Lou	Con	190	Sor	Vo.1
1 y 1	1111	195	116	мта	GIU	Asn	200	vai	361	ASII	Leu	205	rne	sei	vai
Ser	Ala	Gln	Lys	Leu	Cys	Glu	Asp	Val	Lys	lle	Gln	Tyr	Thr	Asp	Thr
	210					215					220				
Lys	Met	11e	Leu	Phe	Met	Val	Ser	Gly	He	Cys	He	Val	Phe	Gly	Phe
225					230					235					240
lle	He	Leu	Leu	Leu 245	Leu	Va]	Leu	Arg	Lys 250	Arg	Arg	Asp	Ser	Leu 255	Ser
Leu	Ser	Thr	Gln	Arg	Thr	Gln	G1 y	Pro	Glu	Ser	Ala	Arg	Asn	Leu	Glu
			260					265					270		
Tyr	Val	Ser 275	Val	Ser	Pro	Thr	Asn 280	Asn	Thr	Val	Tyr	Ala 285	Ser	Val	Thr

<210> 3507

<211> 160

<212> PRT

<213> Homo sapiens

<400> 3507 Met Pro Ala Ile Ser Val Ser Pro Ser Leu Gln Lys Tyr Ser Lys Gln Gln Lys Leu Asn Thr Tyr Glu Val Asn Thr Lys Asp Leu His Arg Lys Ile Ser Gly Ser Ser Val Asp Ala Ile Ala His Cys Ser Ala Gly Gln Ser Ser Gly Leu Ser Phe Asp Phe Gly Pro Val Leu Gln Asn Gln Gln Pro Phe Ser Gln Lys Thr Val Glu Cys Ser Gln Asp His Leu Trp Lys Val Asn Tyr Ser Ile Phe Asn Leu Leu Pro'Trp Ala Met Met Ser Glu Thr Gln His Gly Gly Arg Thr Ser Ser Cys Val Gly Asn Leu Ser Glu Pro Pro Trp Arg Pro Pro Lys Trp Leu Trp Gln Ser Cys Arg Gly Gly Gly Asn Lys Lys Gly Asp Thr Trp Leu Ser Phe Leu Asn Gln Leu Thr

Met Gly Thr His Leu Tyr Trp Asn Phe Arg Val Arg Lys Tyr Gln Asn

<210> 3508

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3508

Met Lys Ser Cys Ser Leu Ala Gly Ala Gly Val Gln Trp His Asp Phe

1 5 10 15

Gly Ser Leu Gln Pro Pro Pro Pro Ser Phe Arg Arg Phe Ser Cys Leu 20 25 30

Thr Leu Pro Arg Ala Gly Ile Thr Gly Val His His Ser Trp Leu
35 40 45

Jle Phe Val Phe Leu Val Gln Met Arg Phe His His Val Gly Gln Ala
50 55 60

Gly Phe Glu Leu Met Thr Leu Ser Gly Leu Pro Ala Leu Ala Ser Gln
65 70 75 80

Asn Ala Gly Ile Thr Gly Met Ser Tyr Tyr Ala Trp Pro Gly Leu Ile 85 90 95

Leu Glu 11e Asp Arg Leu Cys Val Ala Leu Ala Thr Val Gln Trp Leu 100 105 110

Phe Thr Ala Val Ile Met Ala His Arg Ser Pro Lys Leu Lys Val Gly
115 120 125

Ser Ser Cys Leu Pro 11e Ser Ala Phe Leu Val Ala Arg Thr Thr Gly 130 135 140

Thr Leu His His Thr Gln Leu Val Leu Gly Val Leu Ser Lys Leu Asp 145 150 155 160

Thr Trp

<210> 3509

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3509

```
Met Ala Lys Glu lle Lys Ser Asn Arg Gln Glu Arg Gly Ala Thr Gly
                                    10
Leu Val Asn Ser Gln Thr Glu Leu Val Ile Gly Gln Trp Lys Val Asp
             20
                                 25
                                                      30
Cys Ser Thr Phe Pro Phe Leu Lys Val Val Cys Tyr Lys Glu Pro Pro
                             40
Leu His Val Arg Ala Ala Leu Asp Ser Leu Ser Phe Ile His Met Ser
                         55
Glu Gly Leu Cys Ser Arg Ala Met Arg Glu Glu Phe Ala Thr Leu Arg
                     70
                                         75
Ala Val Ser Trp Asn Pro Gly Ala Pro Phe His Val Ser Leu Gly Ala
                                     90
                 85
Glu Arg Val Thr His Val Trp Glu Trp Tyr Val Trp Gln Ser Met Trp
            100
                                105
                                                    110
Ala Phe Gly Phe Leu His Trp Cys Ala His Ile Leu Cys Pro Met Ile
        115
                            120
                                                125
Phe Asn Leu Asp Lys Glu IIe Asp Ile Cys Phe Pro His Leu Gly Asp
                        135
Lys
145
<210> 3510
<211> 606
<212> PRT
<213> Homo sapiens
<400> 3510
Met Phe Gly Asn Glu Cys Cys Phe Ser Thr Gly Glu Val 11e Lys 11e
 ]
                 5
                                     10
                                                          15
Thr Gly Leu Lys Val Lys Lys Ile Ile Ala Glu Ile Cys Glu Gln Ile
                                 25
Glu Gly Cys Glu Phe Leu Gln Pro Phe Glu Leu Pro Met Asn Phe Pro
                             40
                                                 45
Gly Leu Phe Lys Ile Val Ala Asp Lys Thr Pro Tyr Leu Thr Met Glu
```

55

60

Glu	lle	Thr	Arg	Thr	He	His	lle	Gly	Pro	Ser	Arg	Leu	Gly	His	Pro
65					70					75					80
Cys	Phe	Tyr	His	Gln	Lys	Λsp	He	Lys	Leu	Glu	Asn	Leu	lle	He	Lys
				85					90					95	
Gln	Gly	Glu	Gln	11e	Met	Leu	Asn	Ser	Val	Glu	Glu	He	Asp	Gly	Glu
			100					105					110		
He	Met	Val	Ser	Cys	Ala	Val	Ala	Arg	Asn	His	Gln	Thr	His	Ser	Phe
		115					120					125			
Asn	Leu	Pro	Leu	Ser	Gln	Glu	Gly	Glu	Phe	Tyr	Glu	Cys	Glu	Asp	Glu
	130					135					140				
Arg	He	Tyr	Thr	Leu	Lys	Glu	lle	Val	Glu	Trp	Lys	Ile	Pro	Lys	Asn
145					150					155					160
Arg	Thr	Arg	Thr		Asn	Leu	Thr	Asp		Ser	Asn	Lys	Trp		Ser
				165					170					175	
Thr	Asn	Pro		Pro	Lys	Asp	Phe		Gly	Thr	Leu	He		Lys	Pro
			180					185					190		
Val	Tyr	Glu	He	Gln	Gly	Val		Lys	Phe	Arg	Lys		He	He	Arg
		195				17 1	200	17 1	,		77	205		c	T
11e		Pro	Ser	Leu	Asp		Glu	Val	Lys	Asp		Ihr	Asp	Ser	lyr
Δ.	210	4	т.	D1 .	1	215	1	1	C	Tl	220	A	1	DL.	C1
	Ala	Asn	irp	rne		GIN	Leu	Leu	ser		GIU	Asp	Leu	rne	
225	Tha	Com	1	C1	230	Duo	11.	Val	Tha	235	Vol	11.	C1	Alo	240
мес	1111	Ser	Lys	245	rne	110	116	vai	250	GIU	vai	116	Glu	255	F1 0
Glu	Glv	Asn	His		Pro	Gln	Ser	lle		Gln	Pro	61 v	lve		He
014	Oly	11.511	260	i,cu	110	OIII	JCI	265	Lcu	OIII	110	01,	270		1.10
Val	He	His		Lvs	Tvr	Gln	Ala		Arg	He	Leu	Ala		Glu	He
		275			- 3 -		280		0			285			
Arg	Ser	Asn	Phe	Pro	Lvs	Arg		Phe	Leu	lle	Pro		Ser	Tyr	Lys
	290				·	295					300			-	•
Gly		Phe	Lys	Arg	Arg	Pro	Arg	Glu	Phe	Pro	Thr	Ala	Tyr	Лsp	Leu
305					310					315					320
Glu	lle	Ala	Lys	Ser	Glu	Lys	Glu	Pro	Leu	His	Val	Val	Ala	Thr	Lys
				325					330					335	
Ala	Phe	His	Ser	Pro	His	Asp	Lys	Leu	Ser	Ser	Val	Ser	Val	Gly	Asp
			340					345					350		

Gln	Phe	Leu	Val	His	Gln	Ser	Glu	Thr	Thr	Glu	Val	Leu	Cys	Glu	Gly
		355					360					365			
He	Lys	Lys	Val	Val	Asn	Val	Leu	Ala	Cys	Glu	Lys	He	Leu	Lys	Lys
	370					375					380				
Ser	Tyr	Glu	Ala	Ala	Leu	Leu	Pro	Leu	Tyr	Met	Glu	Gly	Gly	Phe	Val
385					390					395					400
Glu	Val	He	His	Asp	Lys	Lys	Gln	Tyr	Pro	11e	Ser	Glu	Leu	Cys	Lys
				405					410					415	
Gln	Phe	Arg	Leu	Pro	Phe	Asn	Val	Lys	Val	Ser	Val	Arg	Asp	Leu	Ser
			420					425					430		
11e	Glu	Glu	Asp	Val	Leu	Ala	Ala	Thr	Pro	Gly	Leu	Gln	Leu	Lys	Glu
		435					440					445			
Asp	He	Thr	Asp	Ser	Tyr	Leu	Leu	He	Ser	Asp	Phe	Ala	Asn	Pro	Thr
	450					455					460				
Glu	Cys	Trp	Glu	He	Pro	Val	Gly	Arg	Leu	Asn	Met	Thr	Val	Gln	Leu
465					470					475					480
Val	Ser	Asn	Phe	Ser	Arg	Asp	Ala	Glu	Pro	Phe	Leu	Val	Arg	Thr	Leu
				485					490					495	
Val	Glu	Glu	lle	Thr	Glu	Glu	Gln	Tyr	Tyr	Met	Met	Arg	Arg	Tyr	Glu
			500					505					510		
Ser	Ser	Ala	Ser	His	Pro	Pro	Pro	Arg	Pro	Pro	Lys	His	Pro	Ser	Val
		515					520					525			
Glu	Glu	Thr	Lys	Leu	Thr	Leu	Leu	Thr	Leu	Ala	Glu	Glu	Arg	Thr	Val
	530					535					540				
Asp	Leu	Pro	Lys	Ser	Pro	Lys	Arg	His	His	Va]	Asp	He	Thr	Lys	Lys
545					550					555					560
Leu	His	Pro	Asn	Gln	Ala	Gly	Leu	Asp	Ser	Lys	Val	Leu	He	Gly	Ser
				565					570					575	
Gln	Asn	Asp	Leu	Val	Asp	Glu	Glu	Lys	Glu	Arg	Ser	Asn	Arg	Gly	Ala
			580					585					590		
Thr	Ala	Val	Ala	Glu	Thr	Phe	Lys	Asn	Glu	Lys	His	Gln	Lys		
		595					600					605			

<210> 3511

<211> 104

<212> PRT <213> Homo sapiens <400> 3511 Met Glu Met Trp Glu Arg Gln Leu Phe Leu Thr Thr Gln Pro Ser Pro] 5 10 15 Leu Pro Gly Gly Thr Pro Arg Asn Glu Ala Leu Pro Leu Arg Glu Phe 25 Pro Ala Thr Pro Ser Leu Gly Pro Gly Met Ala Ala Val Arg Ala Pro 35 Ala Pro Ser Gly Asp Ser Leu Gly Thr Asn Tyr His Arg Pro Trp Ala 55 Thr Ser Lys Ala Ala His Thr Asp Thr Pro Ser Leu Val Thr Ser Pro 70 75 Gln Glu Glu Gly His Pro Arg Lys Gly Gly Arg Leu Pro Gly Leu Glu 85 90 95 Pro Leu Gln Gly Leu Thr Arg His 100 <210> 3512 <211> 103 <212> PRT <213> Homo sapiens <400> 3512 Met Glu Ala Gly Cys Lys Leu Lys Leu Lys Pro Pro Leu Tyr Phe Ser 10

 Ser Thr
 11e
 G1y
 Phe
 G1u
 Ser
 Pro
 Asp
 G1y
 Ser
 Ser
 Tyr
 Pro
 His
 Phe

 Lys
 Pro
 Cys
 Leu
 Leu
 Thr
 11e
 Ser
 Ser
 Cys
 Ser
 Leu
 Thr
 G1n
 Ser
 Pro
 Asp
 Pro
 Asp
 Thr
 Val
 Lys
 G1y
 Arg
 Leu
 Phe
 Thr

 G1n
 Ala
 His
 Lys
 Thr
 Leu
 Asp
 Tyr
 His
 Ser
 Pro
 Val
 11e
 Leu
 Leu
 Ser

 65
 Tyr
 Thr
 Lys
 Tyr
 <t

Tyr Cys Ser Leu Leu Tyr Leu Ser Pro Leu Lys Pro Pro Trp Pro Pro Pro Ile Leu Val Ser Leu His <210> 3513 <211> 244 <212> PRT <213> Homo sapiens <400> 3513 Met Ser His Arg Ala Trp Pro Thr Ser Ala Leu Leu Asn Leu Ser Ser Leu Ser Leu Thr Leu Pro Gln Trp Leu Leu Tyr Gln Pro Thr Lys Lys. Ala Pro Leu Pro Thr Leu Ala Gly Gln Arg Ala His Ser Leu Pro Ser His Lys Pro Val Pro His Ala Trp Ala Leu Leu Arg Pro Lys Gln Pro Ser Ser Asn Ser Glu Glu Asn Pro Glu Leu Leu Leu Leu Thr Val Val lle His Pro Leu Asn Ala Tyr Cys Gly Ser Pro Glu Thr 11e Thr Trp Leu Ala Ser Val Asn Ser His Asn Ser Phe Gln Cys Tyr His Ser Cys Val Cys Pro Leu Leu Pro Trp Leu Ser Pro Arg Tyr Phe Leu Gln Asp Ser Val Pro Ser Leu Val Ser Gly Phe Ser Arg Tyr Leu Pro Met Ala Cys Leu Gly Pro Ala Ser Gly Asn Pro Ala Trp Ile Val Ala Arg Lys

Gly Cys Glu Asp Trp Met Pro Pro Phe Val Phe Val Phe Ser Phe Ile

Pro Ser Phe Leu Ser Ser Leu Pro Ser Phe Leu Pro Leu Ser Leu Ser

 Leu
 Ser
 Phe
 Leu
 Ser
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 P

<210> 3514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3514

Met Arg Val Pro Val Leu Tyr Pro Phe Gln His Leu Val Leu Ser Val 1 5 10 15

Lys Lys Ile Ile Leu Val Ser Met Gln Trp Tyr Leu Ile Lys Asp Thr 20 25 30

Gln Met Ala Asn Lys Gln Met Lys Arg Cys Ser Ile Ser Leu Ala Thr 35 40 45

Gly Glu Met Gln Ile Lys Thr Thr Val Arg Tyr His Phe Thr Pro Thr
50 55 60

Arg Phe Thr 11e 11e Lys Arg Trp Lys 11e Thr Ser Val Asp Lys Asn 65 70 75 80

Leu Glu Lys Met Glu Pro Ser Tyr Thr Ile Gly Gly Asn Val Gly Trp

85 90 95

Cys Ser Cys Ser Glu Lys Gln Phe Leu Thr Leu Gly
100 105

<210> 3515

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3515 Met Glu Ala Arg Pro Pro Pro Glu Arg Gly Ser Leu Lys Ile Ile Leu Thr Ser Leu Ser Ser Val Leu Thr Ser Leu Asp Cys Ile Leu Ser Phe His Leu Arg Ser Ser Trp Phe Trp Leu Ala Ser Ser Asp Ile Thr Pro Ala Glu Glu Arg Glu Gly Thr Arg Cys Ile Thr Ala Trp Ser Gln Gly Pro Arg Leu Ile Cys Leu His Ser Thr Phe Gln Ser Leu Met Phe Val

Leu Cys Ile Leu Ser Arg Gly Phe Arg Ser Leu Ser Arg Lys Asn Arg

Glu Lys Tyr Val Tyr Ser Ser Leu Met Glu Val Glu Phe Ser

<210> 3516

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3516

Met Leu Leu Glu Gly Arg Asp Gly Thr Ser Ile His Leu Val Asn Asn

Cys Gly Leu Ser Ser Val Ser Met Pro Ala Thr Val Leu Ser Ser Asp

His Thr Ala Val Asn Arg Ile Asp Glu Leu Ser Leu Ser Ser Trp Ser

Ser Gln Pro Ser Gly Glu Asp Arg Tyr Ile Gly Asn Lys Phe Leu Ile

Ala Ser Lys Gly Ala Ser Pro Lys Lys His Gln Val Thr Gly Tyr Arg

Thr Met Trp Asp Gly Pro Gly Arg Val Cys Glu Phe Pro Val Ala Ala

Val Thr Asn Tyr His Lys Phe Ser Gly Leu Lys Leu 11e Lys Met Gly
100 105 110

Arg Val Gln Trp Leu Met Pro Val Ile Pro Ala Leu
115 120

<210> 3517

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3517

Met Pro Phe Ala Trp Pro Ala Pro Glu Trp Pro Gln Cys Gly Arg Ala 1 5 10 15

Ala Glu Ala Pro Arg His Gln Cys Asp Pro Val Ser Thr Ala Cys Ser 20 25 30

Leu Trp Thr Pro Phe Ser Ser His Gly Pro Pro Arg His Ser Ala Pro
35 40 45

Gly Pro Ser Ala Phe Pro Gln Leu Ala Leu Trp Lys Cys Gly Gln Gln 50 55 60

Cys Phe Gln Ser Pro Ser Ala Trp Val Cys Pro Val Phe Pro Cys Val 65 70 75 80

Asp Glu Gly Pro Ala Leu Leu Ala Gly Ala Ala Leu Asp Thr Pro Phe
85 90 95

Pro Arg His Ser Pro Gly Leu Ala His Met Gln Leu Arg Ser Arg Gly
100 105 110

Met Leu Thr Gln Arg Leu Val Gly Ala Ala Ser Thr Asp Phe Ser Leu 115 120 125

Glu Ser Ser Cys Leu Leu Phe 11e Val Ser Arg Cys Leu Arg Glu 11e 130 135 140

Pro

<211> 100 <212> PRT <213> Homo sapiens <400> 3518 Met Phe Lys Lys Asn Gly Ser Phe Arg Asn Asp Lys Leu Phe His Pro 10 Ile Thr Pro Asn Thr Cys Gly Ser Asp Ser Ser Leu His Leu Tyr Ile 25 Leu Tyr Leu His Trp Pro Asp His Pro Arg Thr Thr Tyr Leu Thr Ser 35 40 45 Ala Pro Phe Cys Leu Leu Thr Gln His Ser Leu Ser Leu Ser Phe Ser 55 60 Leu Pro Leu Pro Leu Phe Leu Pro Arg Pro Ser Val Thr His Thr His 70 75 65 80 Thr His Thr His Arg Leu His Asn Ala His Arg Asn Val Leu 85 90 95 Ile Pro Phe Val 100 <210> 3519 <211> 103 <212> PRT <213> Homo sapiens <400> 3519 Met Gly Gly Arg Ser His Pro Gln Pro Ala Gly Thr Arg Trp Arg Leu 5 10 Lys Ser Leu Ser Thr Leu Thr Leu Val His Leu Thr Gly Thr Leu Thr 30 20 25 Ser Ile Ser Lys Thr Trp Ser Leu Arg Thr Pro Cys Leu Gln Arg Leu Leu 11e Ser Ser Arg Val Leu Gly 11e Gln Gly Arg Gly Gln Pro Gly 50 55 60

Trp Thr Gly Ser Trp Glu Gly Val Ser Trp Gln Pro Pro Gly Gln Thr

65 70 75 Asp Leu Pro Ala Cys Gln Arg Gln Pro Val Leu Pro Ala Pro Thr Arg 90 Thr Ser Ser Gln Ala Arg Cys 100 <210> 3520 <211> 105 <212> PRT <213> Homo sapiens <400> 3520 Met Arg Ile Leu Val Ile Pro His Leu Gln Gln His Leu Gly Tyr Phe 1 5 Thr Trp Phe Ile Ile Cys Ile Ser Leu Met Thr Asn Glu Arg His Phe 25 Val Ile Tyr Val Phe Asp Val Tyr Leu Ser Ser Ile Val Lys Cys Leu 40 45 Phe Lys Ser Phe Asp His Ile Leu Ile Gly Gln Leu Phe Phe Leu Leu 50 55 60 Leu Asn Tyr Ser Pro Leu Ser Ile Leu Asn Thr Ile Pro Ser Ser Asp 70 75 Met Arg Ser Val Asn Ile Phe Ser Gln Ala Ala Ala Cys Leu Phe Ile 90 95 Phe Leu Leu Val Tyr Phe Val Lys Phe 100 105

<210> 3521

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3521

Met Ser Gly Ser Ser Arg Met Gly Thr Thr Thr Ser Arg Ser Gly Ser

Glu Pro Pro Ala Val Arg Pro Ala Lys Ala Arg Val Arg Met Pro Ser Arg Ser Met Ala Pro Gly Ser Ala Pro Pro Arg Cys Gly Lys Gly Leu Gly Arg Ala Leu Arg Pro Leu Pro Arg Ser Pro Cys Ser Pro His Ser Gly Thr Ala Asn Ala Thr Gly Gln Pro Ala Val Pro Arg Lys Glu Ser Gln Gly Arg Glu Thr Pro Pro Arg Ala Ala Ser Val His Pro Ala Ala Arg Ala Ser Tyr Leu Cys Leu Ser Lys Gln Ser Ala Pro Trp Glu Leu Lys Tyr Asn Arg Cys Gln Val Gln Gly Arg Arg Phe Ala Ala Glu Asn <210> 3522 <211> 103 <212> PRT <213> Homo sapiens <400> 3522 Met Tyr Gln Gly Lys Glu Gly Arg Lys Arg Arg Ser Arg Ser Arg Asp Ser Gly Glu Leu Gly Leu Ser Pro Ala Ala Val Leu Arg Val Ser Leu Asn Cys Pro Trp Ala Ala Ser Leu Glu Val Leu Lys Gly Ser Leu Glu Gly Asn Lys Trp Pro Leu Cys Val Glu Ala Leu Val Arg Val Tyr Lys Ser Lys Thr Gln Leu Gly Ala Val Ala His Ala Cys Asn Pro Ser Arg Gly Arg Gln Ile Thr Trp Gly Gln Glu Phe Glu Thr Ser Leu Ala Asn

Val Val Lys Pro Arg Leu Tyr 100

<210> 3523

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3523

Met Ala Trp Ile Pro Leu Phe Leu Gly Leu Leu Ala Tyr Cys Thr Gly

1 5 10 15

Ser Val Ala Ser Tyr Asp Leu lle Gln Thr Pro Ser Leu Ser Val Ser 20 25 30

Pro Gly Leu Thr Ala Thr lle Thr Cys Ser Gly Asp Arg Leu Gly Ser

35 40 45

Arg Phe Val Ser Trp Tyr Gln Gln Arg Ser Gly Gln Ser Pro Val Val
50 55 60

Val Leu Phe Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe
65 70 75 80

Ser Gly Ser Asn Ser Gly Asp Thr Ala Thr Leu Asn Ile Thr Gly Ala 85 90 95

Gln Thr Leu Asp Glu Ala His Tyr Tyr Cys Gln Val Trp Asp Ala Asp 100 105 110

Thr Gly Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Glu 115 120 125

Thr Leu Cys Val IIe Ser Phe Phe Val Cys Pro Leu Ser Asn Glu Asp 130 135 140

Gln Ser Phe Ser Leu His Ser Arg Pro Asp Arg Gly Pro Leu Ser Ser 145 150 155 160

Leu Leu Arg Pro Ser Ile Gly Ser Pro Arg Arg His Thr His Ser Met 165 170 175

Thr Asp Thr Arg Val Arg Gly Gln Asp Gly Val Ala Tyr 180 185 <210> 3524 <211> 143 <212> PRT <213> Homo sapiens <400> 3524 Met Gly Asp Leu Thr Cys Arg Thr Trp Thr Cys Gln His Arg Ser Leu 10 Leu Thr Leu Pro Val Cys Gly Phe Leu Pro Ser Cys Ala Pro Trp Leu 20 25 Arg Arg Pro Gly Asn Ser Ser Leu Gly Ile Pro Ala Glu Gln Leu Leu Gly Leu Gly Tyr Thr Ser Gln Trp Glu Gly Leu Ala Trp Gly Leu Arg 50 55 60 Ala Arg Gly Gly Val Val Gly Gly Val Cys Leu Thr Ser Lys Asn Leu 70 75 65 Leu Gln Ile Arg Glu Asn Met Lys Glu Leu Asp Phe Gly Phe Pro Gly 90 Leu Pro Asp Leu Val Ala Leu Gly Ser Gly Asp Ile Trp Arg Leu Ile 100 Leu Cys Ser Arg Asp Lys Asn Pro Leu His Ala His Ser Leu Phe Pro 120 Leu Asn Arg Glu Lys Leu Gly Leu Glu Asp Thr Ala Pro Thr Ser 135 140 130 <210> 3525 <211> 313 <212> PRT

<400> 3525

<213> Homo sapiens

Met Gly Ala Glu Ala Ser Ser Ser Trp Cys Pro Gly Thr Ala Leu Pro

1 5 10 15

Glu Glu Arg Leu Ser Val Lys Arg Ala Ser Glu Ile Ser Gly Phe Leu

20 25 30

	0.1	0.1		0	0.1	0.1					1, 7		Œ1		., .
Gly	GIn		Ser	Ser	Gly	Glu		Ala	Leu	Asp	val		Ihr	HIS	val
	0.1	35		0.1			40	TI.	0	C		45		Б	C
Leu		Gly	Ala	Gly	Asn	Lys	Leu	Inr	Ser	Ser		GIY	Lys	Pro	Ser
a	50			0	,	55	æ	·cei	4.3	17 1	60	T)	151		TD.
	Asn	Arg	Met	Ser		Gln	Irp	lhr	Ala		Λla	Ihr	Phe	Leu	
65					70					75					80
	0.1		DI	., 1	v 1				0	7.1	D	131	7.1	C	D
Ala	GIU	val	Phe		vai	Leu	Leu	Leu		116	Pro	Pne	He		Pro
,		т.	C1	85	т1.	D)		С.	90	1	W - 3	C1		95	W - 1
Lys	Arg	rp		Lys	11e	Phe	Lys		Arg	Leu	vai	GIU		Leu	vai
C	т	C1	100	TI	DI	DI	V. I	105	1 .	11.	17.1	11.	110	17.1	1
ser	iyr		ASN	inr	rne	Phe		vai	Leu	116	vai		Leu	vai	Leu
1	V = 1	115	A	A 1	Val	Λ	120	11.	A 20.00	1	Т	125	A - 11	Val	The
Leu		116	ASP	МТА	vai	Arg	Glu	116	Arg	Lys		ASP	ASP	val	1111
C1	130	V = 1	۸	1	C1	135	A = 10	Daga	C1	110	140 Mat	C1	ш	Dha	U; a
	LyS	vai	ASII	rea		Asn	ASH	110	Gry	155	мет	Giu	1115	rne	160·
145	Luc	Lau	Dha	A 200	150	Cln.	Ana	Aan	Lou		Tlo	A1 0	C1v	Dho	
Met	Lys	Leu	rne	165	нта	Gln	AI g	VSII	170	1 9 1	116	міа	СГУ	175	261
Lou	Lou	Lau	Sor		Lou	Lou	Ara	Ara		Val	Thr	Lou	110		Gln
Leu	Leu	Leu	180	THE	Leu	Leu	Mg	185	Leu	vai	1111	Leu	190	561	0111
Cln	Λla	The		Lou	A10	Ser	Acn		Λla	Pho	Lvc	Lvc		Ala	Glu
1110	Ма	195	Leu	Leu	пта	361	200	Olu	MIG	THE	Lys	205	Oili	MIG	Oju
Sor	Ala		Glu	Ala	Ala	Lys		Tyr	Met	Glu	Glu		Asn	Gln	Leu
561	210	561	ora	7176	.,,,	215	15) 5	.,.	,,,c.c	oru	220	11011	пор	OIII	Lea
Lvs		Glv	Ala	Ala	Val	Asp	Glv	Glv	Lvs	Leu		Val	Glv	Asn	Ala
225	2,0	01,	7110	7110	230		01)	OI,	2,0	235		,	0. ,		240
	Val	Lvs	Leu	Glu		Glu	Asn	Arg	Ser			Ala	Asp	Leu	
		-,-		245				0	250		_,_			255	
Lvs	Leu	Lvs	Asp		Leu	Ala	Ser	Thr		Gln	Lvs	Leu	Glu		Ala
			260					265	,		_,		270		
Glu	Asn	Gln		Leu	Ala	Met	Arg	Lys	Gln	Ser	Glu	Gly	Leu	Thr	Lys
		275					280	•				285			•
Glu	Tyr		Arg	Leu	Leu	Glu		His	Ala	Lys	Leu		Ala	Ala	Val
	290		-			295					300				
Asp	Gly	Pro	Met	Asp	Lys	Lys	Glu	Glu							

305 310

<210> 3526

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3526

Met Glu Pro Ala Leu Arg Trp Arg Thr Gln Thr Leu Ser Leu Lys Gly

1 5 10 15

Arg Arg Arg Thr Gly Asn Ser Trp Ala His Pro Arg Asp Lys Arg His
20 25 30

Arg Leu Asn 11e Ser Pro Pro Pro Ser Pro Thr Asn Leu Pro Arg Arg
35 40 45

Pro Ala Pro Thr Pro Pro Pro Arg Pro Asp Pro Pro Leu Ala Val Gly
50 55 60

Val Thr Gln Gly Gln Arg Leu Arg Val Pro Gly Asp Lys Val Gly His
65 70 75 80

Ser Ser Ser Leu His Pro Gly Pro Arg Asn Thr His Gln Arg Thr Ala 85 90 95

Val Arg Gly Arg Thr Arg Ala Cys Val Cys Val Cys Val Arg 100 105 110

Ala Arg Ala Arg Ala His Thr Gly Gln Gly Ser Leu Ile Arg Asn Ala 115 120 125

Gly Gly Thr Ser Ser Val Ser Asp Phe Arg Phe Phe His Ile Ser Glu 130 135 140

Cys Leu His Tyr Ile Val Ser

145 150

<210> 3527

<211> 361

<212> PRT

<213> Homo sapiens

<400)> 35	527													
Met	Cys	Val	Trp	Arg	Leu	He	Leu	Asp	Ala	Val	Asp	G1 y	Arg	Glu	Cys
1				5					10					15	
His	His	Leu	Val	His	Cys	Tyr	Met	Pro	G1n	Glu	Пе	lle	Ala	Gln	Pro
			20					25					30		
Phe	Leu	Asn	Phe	Lys	Val	Phe	Leu	Phe	Asn	Arg	Phe	Cys	Thr	Asp	Cys
		35					40					45			
Lys	Asn	Lys	Val	Leu	Arg	Ala	Tyr	Asn	He	Leu	He	Gly	Glu	Leu	Asp
	50					55					60				
Cys	Ser	Lys	Glu	Lys	Gly	Tyr	Cys	Ala	Ala	Leu	Tyr	Glu	Gly	Leu	Arg
65					70					75					80
Cys	Cys	Pro	His	Glu	Arg	His	He	His	Val	Cys	Cys	Glu	Thr	Asp	Phe
				85					90					95	
He	Ala	His	Leu	Leu	Gly	Arg	Ala	G] u	Pro	Glu	Phe	Ala	Gly	Gly	Arg
			100					105					110		
Arg	Glu	Arg	His	Ala	Lys	Thr	He	Asp	He	Ala	Gln	Glu	Glu	Val	Leu
		115					120					125			
Thr	Cys	Leu	Gly	Ile	His	Leu	Tyr	Glu	Arg	Leu	His	Arg	Ile	Trp	Gln
	130					135					140				
Lys	Leu	Arg	Ala	Glu	Glu	Gln	Thr	Trp	Gln	Met	Leu	Phe	Tyr	Leu	Gly
145					150					155					160
Va]	Asp	Ala	Leu	Arg	Lys	Ser	Phe	Glu	Met	Thr	Va]	Glu	Lys	Val	Gln
				165					170					175	
61 y	He	Ser	Arg	Leu	Glu	Gln	Leu	Cys	Glu	Glu	Phe	Ser	Glu	Glu	Glu
			180					185					190		
Arg	Val		Glu	Leu	Lys	Gln	Glu	Lys	Lys	Arg	Gln	Lys	Arg	Lys	Asn
		195					200					205			
Arg		Lys	Asn	Lys	Cys	Val	Cys	Asp	He	Pro		Pro	Leu	Gln	Thr
	210					215					220				
	Asp	Glu	Lys	Glu		Ser	GIn	Glu	Lys		Thr	Asp	Phe	He	
225	.~				230		0.1		m.	235		0.1		m i	240
Asn	Ser	Ser	Cys		Ala	Cys	61 y	Ser		6Ju	Asp	GIŸ	Asn		Cys
V. 1	61	12 3	7.1	245	TI	4	C 1	Δ.	250	C.	C.	TI	C.	255 D	C.
va!	GHH	val	116	Val	Ihr	Asn	ьш	Λsn	Inr	Ser	Cys	ınr	Cys	rro	ser
				-											
C			260					265					270		Pro

His Cys Asn Gly Ser Asp Cys Gly Tyr Ser Ser Ser Met Glu Gly Ser Glu Thr Gly Ser Arg Glu Gly Ser Asp Val Ala Cys Thr Glu Gly 11e Cys Asn His Asp Glu His Gly Asp Asp Ser Cys Val His His Cys Glu Asp Lys Glu Asp Asp Gly Asp Ser Cys Val Glu Cys Trp Ala Asn Ser Glu Glu Asn Asp Thr Lys Gly Lys Asn <210> 3528 <211> 130 <212> PRT

<400> 3528

<213> Homo sapiens

Met Arg Pro Gln Ser Phe Arg Ser Arg Pro Trp Gly Val Arg Ala Pro Pro Gly Asn Thr Val Arg Pro Gln Arg Leu Gln Pro Lys Leu Ala Arg Ser Met Gly Gln Val Pro Leu Cys Leu Glu Lys Pro Gly Ala Leu Leu Pro Cys Pro Pro Glu Pro Thr Ala Gly Arg Thr Pro Pro Ala Pro Pro His Pro Val Ala Arg Asp Pro Ser Glu Asn Ser Glu Ala Gly Pro Arg Ala Val Pro Ala Gly Ala Arg Pro Val Gly Arg Thr Gln Pro Arg Asn Gln Leu Pro Glu Thr Arg Val Pro Leu Gly Cys Pro Pro Ala Trp Arg Arg Pro Gln Ala Arg Ser His Pro Phe Pro Glu Leu Gln Asp Arg Ala

Ser Ser

<210> 3529

<211	1> 32	27													
<212	2> PI	RT													
<213	3> He	omo s	sapie	ens											
<400)> 35	529													
Met	Gly	He	Cys	Phe	Glu	Glu	Lys	Ser	Cys	Lys	Cys	Phe	Cys	Leu	I1ε
1				5					10					15	
Phe	Пe	Ala	Leu	Gly	Met	Val	Pro	Pro	Pro	Glu	Asn	Val	Arg	Met	Asr
			20					25					30		
Ser	Val	Asn	Phe	Lys	Asn	He	Leu	Gln	Trp	Glu	Ser	Pro	Ala	Phe	Ala
		35					40					45			
Glu	Gly	Asn	Leu	Thr	Phe	Thr	Ala	Gln	Tyr	Leu	Ser	Tyr	Arg	He	Phe
	50					55					60				
G1n	Asp	Lys	Cys	Met	Asn	Thr	Thr	Leu	Thr	Glu	Cys	Asp	Phe	Ser	Ser
65					70					75					80
Leu	Ser	Lys	Tyr	Gly	Asp	His	Thr	Leu	Arg	Val	Arg	Ala	Glu	Phe	Ala
				85					90					95	
Asp	Glu	His	Ser	Asp	Trp	Val	Asn	He	Thr	Phe	Cys	Pro	Val	Asp	Asp
			100					105					110		
Thr	He	11e	Gly	Pro	Pro	Gly	Met	Gln	Va]	Glu	Val	Leu	Ala	Asp	Ser
		115					120					125			
Leu	His	Met	Arg	Phe	Leu	Ala	Pro	Lys	He	Glu	Asn	Glu	Tyr	Glu	Thr
	130					135					140				
Trp	Thr	Met	Lys	Asn	Val	Tyr	Asn	Ser	Trp	Thr	Tyr	Asn	Val	Gln	Tyr
145					150					155					160
Trp	Lys	Asn	Gly	Thr	Asp	G] u	Lys	Phe	G1n	He	Thr	Pro	Gln	Tyr	Asp
				165										175	
Phe	Glu	Val	Leu	Arg	Asn	Leu	Glu	Pro	Trp	Thr	Thr	Tyr	Cys	Val	Gln
			180					185					190		
Val	Arg		Phe	Leu	Pro	Asp		Asn	Lys	Ala	Gly		Trp	Ser	Glu
		195					200					205			
Pro	Val	Cve	Glu	Gln	Thr	Thr	Hic	Asn	G1n	Thr	Val	Pro	Ser	Trn	Met

	210					215					220				
Val	Ala	Val	lle	Leu	Met	Ala	Ser	Val	Phe	Met	Val	Cys	Leu	Ala	Leu
225					230					235					240
Leu	Gly	Cys	Phe	Ala	Leu	Leu	Trp	Cys	Va1	Tyr	Lys	Lys	Thr	Lys	Tyr
				245					250					255	
Ala	Phe	Ser	Pro	Arg	Asn	Ser	Leu	Pro	Gln	His	Leu	Lys	Glu	Phe	Leu
			260					265					270		
Gly	His	Pro	His	His	Asn	Thr	Leu	Leu	Phe	Phe	Ser	Phe	Pro	Leu	Ser
		275					280					285			
Asp	Glu	Asn	Asp	Va]	Phe	Asp	Lys	Leu	Ser	Val	Ile	Ala	Glu	Asp	Ser
	290					295					300				
Glu	Ser	Gly	Lys	Gln	Asn	Pro	Gly	Asp	Ser	Cys	Ser	Leu	Gly	Thr	Pro
305					310					315					320
Pro	Gly	Gln	Gly	Pro	Gln	Ser									
				325											
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<21	1> 18	32													
<212	2> PI	TS													
<213	3> Ho	omo s	sapi	ens											
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Met	Leu	Glu	Lys	Gly	Ala	Leu	Asp	Leu	Ala	Thr	Ser	Gly	Leu	Cys	Thr
ì				5					10					15	
Pro	Gly	Ala	Glu	Gly	Thr	Gln	Gly	Cys	Thr	Tyr	Thr	Leu	Lys	Ala	Thr
			20					25					30		
Val	Arg	Thr	Gly	Glu	Gln	Gly	Gln	Arg	Ala	Met	Glu	Ser	Pro	Ala	Glu
		35					40					45			
Gly	Cys	Thr	Ser	Arg	Leu	Lys	Arg	Ala	Leu	Pro	Ala	Ser	Ala	Arg	Lys
	50					55					60				

Pro Gly Leu Trp Gly Cys Val 11e Val Asp Asp His Phe Gln Val Met

Ala Thr Ala Pro Val Leu Val Thr Ala Gly Pro Pro Ile Leu Leu Arg

His Pro Pro Leu Ser His Arg Ala Val Phe Arg Ala Ser Ala Gly Leu

Ser Cys Cys Ser Gln Thr Leu Ala Leu Arg Lys Ala Gly Gln Ser Thr Ser Cys Ser Leu Arg Gly Gly Gln Val Phe Val Ser Lys Gly Gly Lys Pro Gly Glu Arg Arg His Gln Ala Pro Glu Thr Phe Glu Met Thr Ser Glu Asp Pro Gly Pro Leu Arg Val Thr Thr Ser Asp Ser Cys Leu Pro Gln Ala Val Thr Asp Val

<210> 3531

<211> 430

<212> PRT

<213> Homo sapiens

<400> 3531

Met Phe Asp Gly Tyr Asp Ser Cys Ser Glu Asp Thr Ser Ser Ser Ser Ser Ser Glu Glu Ser Glu Glu Glu Val Ala Pro Leu Pro Ser Asn Leu Pro lle lle Lys Asn Asn Gly Gln Val Tyr Thr Tyr Pro Asp Gly Lys Ser Gly Met Ala Thr Cys Glu Met Cys Gly Met Val Gly Val Arg Asp Ala Phe Tyr Ser Lys Thr Lys Arg Phe Cys Ser Val Ser Cys Ser Arg Ser Tyr Ser Ser Asn Ser Lys Lys Ala Ser IIe Leu Ala Arg Leu Gln Gly Lys Pro Pro Thr Lys Lys Ala Lys Val Leu Gln Lys Gln Pro Leu Val Ala Lys Leu Ala Ala Tyr Ala Gln Tyr Gln Ala Thr Leu Gln Asn

Gln Ala Lys Thr Lys Ala Ala Val Ser Met Glu Gly Phe Ser Trp Gly

	130					135					140				
Asn	Tyr	lle	Asn	Ser	Asn	Ser	Phe	He	Ala	Ala	Pro	Val	Thr	Cys	Phe
145					150					155					160
Lys	His	Ala	Pro	Met	Gly	Thr	Cys	Trp	Gly	Asp	11e	Ser	Glu	Asn	Val
				165					170					175	
Arg	Val	Glu	Val	Pro	Asn	Thr	Asp	Cys	Ser	Leu	Pro	Thr	Lys	Val	Phe
			180					185					190		
Trp	lle	Ala	Gly	Ile	Val	Lys	Leu	Ala	Gly	Tyr	Asn	Ala	Leu	Leu	Arg
		195					200					205			
Tyr	Glu	Gly	Phe	Glu	Asn	Asp	Ser	Gly	Leu	Asp	Phe	Trp	Cys	Asn	Ile
	210					215					220				
Cys	Gly	Ser	Asp	He	His	Pro	Val	G] y	Trp	Cys	Ala	Ala	Ser	Gly	Lys
225					230					235					240
Pro	Leu	Val	Pro	Pro	Arg	Thr	He	Gln	His	Lys	Tyr	Thr	Asn	Trp	Lys
				245					250					255	
Ala	Phe	Leu		Lys	Arg	Leu	Thr		Ala	Lys	Thr	Leu		Pro	Asp
			260					265					270		
Phe	Ser		Lys	Val	Ser	Glu		Met	Gln	Tyr	Pro		Lys	Pro	Cys
		275					280					285			
Met		Val	Glu	Val	Val	Asp	Lys	Arg	His	Leu		Arg	Thr	Arg	Val
	290	., .	0.1			295	0.1	6.1		,	300	,	17. 3	Tr.	0.1
	Val	Val	Glu	Ser		He	G1 y	G1 y	Arg		Arg	Leu	val	lyr	
305	C	C1	Λ	Λ	310	Λ	A	D1: -	т	315	113 -	Mad	ш.	C	320 Dma
61U	ser	618	ASP	_	ınr	Asp	ASP	rne		Cys	nis	мет	HIS		rro
Lov	110	ui c	u; ~	325	C1 ₃ .	Trn	Som	Ana	330	11.	C1	Hi c	Arc	335	Lvc
Leu	116	111.5	340	116	оту	Trp	361	345	261	116	01 À	1118	350	тие	LyS
Ara	Ser	Aen		Thr	lve	Lys	Gla		Glv	Hic	Phe	Aen		Pro	Pro
nı g	961	355	116	1 (13	Lyo	riso	360	nop	OIÀ	1113	1 116	365	1111	110	110
His	Leu		Ala	Lvs	Val	Lys		Val	Asp	Gln	Ser		Glu	Tro	Phe
	370			2,0		375	U	1	р		380	~.,		p	
Lvs		Glv	Met	Lvs	Leu	Glu	Ala	He	Asp	Pro		Asn	Leu	Ser	Thr
385				; 0	390					395					400
	Cys	Val	Ala	Thr		Arg	Lys	Val	Thr		Asn	Phe	Leu	Leu	
	, -			405					410					415	
Glv	Leu	Thr	Thr		Glv	Lve	Leu	Ala		Lau	Glo	Hie	Glo		

420 425 430

<210> 3532

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3532

Met Val Glu Gly Arg Arg Ala Leu Leu Gly Ala Trp Glu Ala Gly Phe

1 5 10 15

Arg Ala Ala Trp Ala Val Pro Pro Glu Gly Gln Asp Pro Thr Gly Gly
20 25 30

Ala Arg Ala Ala Thr Pro Gln Thr Asn Glu Phe Lys Gly Ala Thr Glu 35 40 45

Glu Ala Pro Ala Lys Glu Ser Pro His Thr Gly Glu Phe Lys Gly Ala 50 55 60

Ala Leu Val Ser Pro Ile Ser Lys Arg Met Leu Glu Arg Leu Ser Lys
65 70 75 80

Phe Glu Val Gly Asp Ala Glu Asn Val Ala Ser Tyr Glu Leu Phe Gly
85 90 95

Val Phe Leu Val Leu Leu Asp Val Thr Leu Val Leu Ala Asp Leu Ile 100 105 110

Phe Thr Asp Ser Lys Leu Tyr lle Pro Leu Glu Tyr Arg Ser lle Ser 115 120 125

Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe 130 135 140

Val Glu Gly Phe

145

<210> 3533

<211> 199

<212> PRT

<213> Homo sapiens

⟨400⟩ 3533 Met His Ala Cys Val Asn Thr Pro Gly Ser Tyr Arg Cys Thr Cys Pro 5 10 Gly Gly Tyr Arg Thr Leu Ala Asp Gly Lys Ser Cys Glu Asp Val Asp 25 20 30 Glu Cys Val Gly Leu Gln Pro Val Cys Pro Gln Gly Thr Thr Cys lle 40 Asn Thr Gly Gly Ser Phe Gln Cys Val Ser Pro Glu Cys Pro Glu Gly 50 55 Ser Gly Asn Val Ser Tyr Val Lys Thr Ser Pro Phe Gln Cys Glu Arg 70 Asn Pro Cys Pro Met Asp Ser Arg Pro Cys Arg His Leu Pro Lys Thr 90 85 lle Ser Phe His Tyr Leu Ser Leu Pro Ser Asn Leu Lys Thr Pro lle 100 105 110 Thr Leu Phe Arg Met Ala Thr Ala Ser Ala Pro Gly Arg Ala Gly Pro 120 125 Asn Ser Leu Arg Phe Gly 11e Val Gly Gly Asn Ser Arg Gly His Phe 130 135 140 Val Met Gln Arg Ser Asp Arg Gln Thr Gly Asp Leu Ile Leu Val Gln 150 155 Asn Leu Glu Gly Pro Gln Thr Leu Glu Val Asp Val Asp Met Ser Glu 165 170 Tyr Leu Asp Arg Ser Phe Gln Ala Asn His Val Ser Lys Val Thr Ile 190 180 185 Phe Val Ser Pro Tyr Asp Phe

<210> 3534

<211> 100

<212> PRT

<213> Homo sapiens

195

<400> 3534

Met Ile Leu Leu Glu Thr Arg Pro Ala Ser Thr Cys Pro Pro Trp Ser

5 10 15 Gln Glu Ala Leu Glu Glu Lys Cys Ser Ile Leu Asp Asp Phe Pro Arg 25 Pro Leu Cys Cys Gln Gln Trp Arg His Pro Glu Leu Ala Glu Val Gly 35 40 45 Thr Ser Tyr Leu Lys Pro Asn Lys Cys Ser Pro Ser Gly Pro Asn Pro 55 60 Gln Cys Leu Ala Leu Cys Leu Leu Ala Leu Ala Leu Thr Ile Gly Ala 65 70 75 Ile His Thr Ala Ile Leu Glu Gly Arg Gly His Ser Pro Ser Ser Lys 90 Lys Glu Asp Gly 100 <210> 3535 <211> 176 <212> PRT <213> Homo sapiens <400> 3535 Met Ser Met Met Ser Ser Arg Lys Thr Met Lys Ala Thr Ile Pro Pro 1 10 Met Met Ala Cys Pro Ala His Leu Arg Ile Phe Leu Glu Glu Asp Ala 20 25 Val Ala Pro Ser Thr Thr Arg Arg Gln His Trp Lys Gln Thr Gln Ser 40 Asn Arg Thr Pro Ser Ala Trp Leu Leu Ser Thr Lys Gln Arg Gly Asp 50 60 55 Gln Gln Asp Thr Asn His Lys Gly Thr Arg Thr Phe Ser His Cys Gln 75 Ser Ser Ser Asp Trp Ser Gly Glu Ile Trp Gly Gln Arg Pro Glu Leu 90 Ser Ala Leu Ser Leu Leu Leu Ala Ser Tyr Asn Ser Leu Val Val Leu 100 105 110 Arg Gln Leu Pro His Ala Glu Val Cys Pro Trp Ser Gly Asn His Pro 115 120 125

Ser Arg His Ser Asp Pro Lys Asn Ser Asp Leu Leu Ser Leu Gly Gly
130 135 140

Leu Ala Leu Ile Pro Ser Thr Val Leu Met Ser Val Ser Ser Lys Gly
145 150 155 160

Ala Ser Asp Val Ser Pro Thr Met His Phe Pro Tyr Ser Glu Lys Arg
165 170 175

<210> 3536

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3536

Met Asp Ser Ala Pro Ala Gly Ser Phe Ser Ala Ser Ser Phe Phe Asp

1 5 10 15

Leu Ser Val Thr Val Thr Arg Ala Lys Asn Ser Arg Gly Pro Ser Ser
20 25 30

Ser Pro Ser Glu Leu Gln Gly Ala His Cys Leu Thr Ser Ser Leu Ala 35 40 45

Ala Ala Cys Ser Val Ala Tyr Ser Ala Leu Trp Ser Ser Ser Pro Leu
50 55 60

Arg Ser Pro Trp Ser 11e Ser Ser I1e Thr Met Pro Arg Leu Ser Ser 65 70 75 80

Glu Glu Ser Ser Ala Ser Leu Leu Ala Gly Ala Asp Gly Arg Pro Pro

85 90 95

Arg Leu Leu Phe Leu Pro Phe Trp Val Asn Leu Leu Arg Leu Val Leu 100 105 110

Phe Leu Arg Pro Arg Arg Pro Leu Leu Gly Phe Leu Ala Ala Pro Arg 115 120 125

Ser Glu Pro Ala Cys Pro Val Thr Ser Pro Glu Ser Trp Ala Cys Val 130 135 140

Thr Leu Val Ser Cys Ala Arg Ser Phe His Arg Thr Leu Gln Thr Pro Ser Leu Pro Gly Ile Ser Leu Gly Met Ala Ala <210> 3537 <211> 536 <212> PRT <213> Homo sapiens <400> 3537 Met Ser Ala Arg Val Pro Val Ser Phe Cys Ile Tyr Ile His Ala Cys Val Pro Val Phe Leu Arg Val Leu Val Cys Ala Arg Val His Leu Cys Val Cys Gln Ser Met Cys Ala Cys Val Cys Leu Ser Ala Tyr Pro Cys Val His Val Cys Val Cys Gln Arg Ile Arg Val Cys Met Cys Val Ser Val Ser Leu Thr Met Cys Ala Cys Val Cys Gln Cys Ile Arg Val Cys lle Cys Val Ser Val His Val Ser Ala Cys Ala Cys Val Tyr Leu Cys Val Ser Ile Lys Gly Pro Pro Arg Pro Gly Ala His Arg Pro Pro Gln Arg Thr Leu His Cys Ser Asp Ser Ser Ser Asp Thr Asp Ser Phe Tyr Gly Ala Val Glu Arg Pro Val Asp lle Ser Leu Ser Pro Tyr Pro Thr Asp Asn Glu Asp Tyr Glu His Asp Asp Glu Asp Asp Ser Tyr Leu Glu Pro Asp Ser Pro Glu Pro Gly Arg Leu Glu Asp Ala Leu Met His Pro

Pro Ala Tyr Pro Pro Pro Pro Val Pro Thr Pro Arg Lys Pro Ala Phe

			180					185					190		
Ser	Asp	Met	Pro	Arg	Ala	His	Ser	Phe	Thr	Ser	Lys	Gly	Pro	Gly	Pro
		195					200					205			
Leu	Leu	Pro	Pro	Pro	Pro	Pro	Lys	His	Gly	Leu	Pro	Asp	Val	Gly	Leu
	210					215					220				
Ala	Ala	Glu	Asp	Ser	Lys	Arg	Asp	Pro	Leu	Cys	Pro	Arg	Arg	Ala	Glu
225					230					235					240
Pro	Cys	Pro	Arg	Val	Pro	Ala	Thr	Pro	Arg	Arg	Met	Ser	Asp	Pro	Pro
				245					250					255	
Leu	Ser	Thr	Met	Pro	Thr	Ala	Pro	Gly	Leu	Arg	Lys	Pro	Pro	Cys	Phe
			260					265					270		
Arg	Glu	Ser	Ala	Ser	Pro	Ser	Pro	Glu	Pro	Trp	Thr	Pro	Gly	His	Gly
		275					280					285			
Ala	Cys	Ser	Thr	Ser	Ser	Ala	Ala	He	Met	Ala	Thr	Ala	Thr	Ser	Arg
	290					295					300				
Asn	Cys	Asp	Lys	Leu	Lys	Ser	Phe	His	Leu	Ser	Pro	Arg	Gly	Pro	Pro
305					310					315					320
Thr	Ser	Glu	Pro	Pro	Pro	Val	Pro	Ala	Asn	Lys	Pro	Lys	Phe	Leu	Lys
				325					330					335	
He	Ala	Glu	Glu	Asp	Pro	Pro	Arg	Glu	Ala	Ala	Met	Pro	Gly	Leu	Phe
			340					345					350		
Val	Pro	Pro	Val	Ala	Pro	Arg	Pro	Pro	Ala	Leu	Lys	Leu	Pro	Val	Pro
		355					360					365			
Glu		Met	Ala	Arg	Pro	Ala	Val	Leu	Pro	Arg		Glu	Lys	Pro	Gln
	370					375					380				
	Pro	His	Leu	Gln		Ser	Pro	Pro	Asp		GIn	Ser	Phe	Arg	
385		ъ.			390		- 1			395					400
Phe	Ser	Phe	Glu		Pro	Arg	GIn	Pro		GIn	Ala	Asp	Thr		Gly
				405			61		410	Б	,	D		415	., .
Asp	Asp	Ser		Glu	Asp	Tyr	Glu		val	Pro	Leu	Pro		Ser	val
DI.	W. 1	Α	420	Tl	C1	C	C	425	V - 1	C1	Α.		430	1	41.
Pne	vai		ını	inr	GJU	Ser		GIU	vai	GIU	Arg		rne	Lys	Ala
T L	S.~~	435	A 22.00	C1	C1	Dana	440	Acs	C1	Lou	Т	445 Cvs	11.	A 1	105
1111	5er 450	110	ung	оту	GIU	Pro 455	OIII	nsp	оту	reu	1yr 460	CyS	116	vi g	nsn
Ser		Thr	Lve	Ser	Glv	lvs	Val	Leu	Val	Val		Aen	Glu	Thr	Ser

Asn Lys Val Arg Asn Tyr Arg Ile Phe Glu Lys Asp Ser Lys Phe Tyr Leu Glu Gly Glu Val Leu Phe Val Ser Val Gly Ser Met Val Glu His Tyr His Thr His Val Leu Pro Ser His Gln Ser Leu Leu Leu Arg His Pro Tyr Gly Tyr Thr Gly Pro Arg

<210> 3538

<211> 472

<212> PRT

<213> Homo sapiens

⟨400⟩ 3538

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Lys Gly Val Gln Cys Glu Pro His Leu Val Glu Ser Gly Gly Gly Leu Val Glu Pro Gly Arg Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Ala Leu Gly Asp Tyr Ala Val Ser Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Gly Phe Ile Arg Ser Glu Thr Leu Gly Gly Thr Pro Glu Asn Ala Ala Ser Leu Glu Gly Arg Cys Leu lle Ser Arg Asp Asp Ser Lys Asn Ser Ala Tyr Leu His Leu Ser Ser Leu Lys Phe Glu Asp Thr Gly Arg Tyr Tyr Cys Met Ala Asp Arg Tyr Asp Glu Arg Asp Tyr Phe Tyr Val Gly Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser

Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr

145					150					155	;				160
Ser	Gly	Gly	Thr	Ala	Ala	Leu	G1 y	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro
				165					170					175	
Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val
			180					185					190		
His	Thr	Phe	Pro	Ala	Va1	Leu	Gln	Ser	Ser	G1 y	Leu	Tyr	Ser	Leu	Ser
		195					200					205			
Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	He
	210					215					220				
Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val
225					230					235					240
Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala
				245					250					255	
Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Va]	Phe	Leu	Phe	Pro	Pro	Lys	Pro
			260					265					270		
Lys	Asp	Thr	Leu	Met	lle	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val
		275					280					285			
Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val
	290					295					300				
	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln
305					310					315					320
Tyr	Asn	Ser	Thr		Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln
				325					330					335	
Asp	Trp	Leu		Gly	Lys	Glu	Tyr		Cys	Lys	Val	Ser	Asn	Lys	Ala
			340					345					350		
Leu	Pro		Pro	He	Glu	Lys		He	Ser	Lys	Ala	Lys	Gly	Gln	Pro
	C1	355 D	C 1	17 3	Tr.	m)	360		Б			365		_	
Arg		Pro	61n	vaı	iyr		Leu	Pro	Pro	Ser		Asp	G1u	Leu	Thr
	370	C1	W. 1	C	,	375	6				380	DI.			_
	ASI	61n	vai	Ser		Ihr	Cys	Leu	Val		GIV	Phe	Tyr	Pro	
385	11.	41 a	V = 1	C1	390	C1	C .		C1	395	D	61			400
ASP	ire	на	vai		ırp	GJU	ser	Asn		GIn	Pro	61u	Asn	Asn	lyr
Lvc	Thr	Thr	Pro	405 Pro	Vel	1	Λ ~	S	410	C1	C	DL -	ÐI.	415	т
Lyo	1111	1111	420	110	val	Leu	vsb		asp	01 À	ser	rne		Leu	ıyr
Ser	lve	الم ا		Vəl	Acn	Lve	Sor	425	Trn	Cln	Cl-	C1	430	Val	DL -
-	L 1 0	1.00	1111	101	(1.51)	1 1	. 31-1	MID	1111		4 1 1 1 1	111 V	W C.D.	W SA I	17170

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys <210> 3539 <211> 447 <212> PRT <213> Homo sapiens <400> 3539 Met Glu Phe Gly Leu Thr Trp Val Phe Leu Val Ala Leu Leu Arg Gly Val Gln Cys Gln Val His Leu Val Glu Ser Gly Gly Gly Val Gly Gln Pro Gly Lys Ser Leu Lys Leu Ser Cys Gln Ala Phe His Leu Asp Phe Lys His Leu Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Leu Ala Val Ile Trp Tyr Asp Gly Ser Asn Ile Phe Tyr Ala 75 · Asp Ser lle Lys Asp Arg Phe lle Ile Ser Arg Asp Asn Gly Asn Arg Thr Leu Tyr Leu Gln Met Asp Asn Leu Arg Ala Asp Asp Thr Ala Val Tyr Phe Cys Val Thr Gly Arg Glu Ser Gly Ser Ser Leu Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Ala Val Leu Gln Ser

Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser

			180					185					190		
Leu	Gly	Thr	Gln	Thr	Tyr	He	Cys	Asn	Val	Asn	His	Lys	Pro	Gly	Asn
		195					200					205			
Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His
	210					215					220				
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val
225					230					235					240
Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	lle	Ser	Arg	Thr
				245					250					255	
Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu
			260					265					270		
Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	G1 y	Val	Glu	Val	His	Asn	Ala	Lys
		275					280					285			
Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Va]	Val	Ser
	290					295					300				
Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys
305					310					315					320
Cys	Lys	Val	Ser	Asn	Lyș	Ala	Leu	Pro	Ala	Pro	He	Glu	Lys	Thr	lle
				325					330					335	
Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro
			340					345					350		
Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu
		355					360					365			
Val		Gly	Phe	Tyr	Pro		Asp	He	Ala	Val		Trp	Glu	Ser	Asn
	370					375					380				
-	Gln	Pro	Glu	Asn		-	Lys	Thr	Thr		Pro	Val	Leu	Asp	
385					390		_			395			_	_	400
Asp	Gly	Ser	Phe		Leu	Tyr	Ser	Lys		Thr	Val	Asp	Lys		Arg
				405			_		410					415	
Trp	Gln	Gln		Asn	Va]	Phe	Ser		Ser	Val	Met	His	Glu	Ala	Leu
			420	m.	<u> </u>	,	0	425	6		C	D	430	,	
His	Asn			Ihr	GIn	Lys			Ser	Leu	Ser		Gly	Lys	
		435					440					445			

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<211> 145
<212> PRT
<213> Homo sapiens
<400> 3540
Met Leu Thr Arg Leu Val Leu Ser Ala His Leu Ser Ser Thr Thr Ser
                                     10
Pro Pro Trp Thr His Ala Ala 11e Ser Trp Glu Leu Asp Asn Val Leu
             20
                                 25
                                                      30
Met Pro Ser Pro Arg Ile Trp Pro Gln Val Thr Pro Thr Gly Arg Ser
                             40
Ala Ser Val Arg Ser Glu Gly Asn Thr Ser Ser Leu Trp Asn Phe Ser
                         55
Ala Gly Gln Asp Val His Ala Ile Val Thr Arg Thr Cys Glu Ser Val
                     70
                                          75
65
Leu Ser Ser Ala Val Tyr Thr His Gly Cys Gly Cys Val Arg Ser Ala
                 85
                                     90
Thr Asn Ile Thr Cys Gln Ser Ser Gly Gln Gln Arg Gln Ala Ala Arg
            100
                                105
                                                     110
Gln Glu Glu Glu Asn Ser Ile Cys Lys Ala His Asp Ser Arg Glu Gly
                            120
                                                 125
Arg Leu Gly Tyr Pro Leu Ser Ala His Gln Pro Gly Ser Gly Gly Pro
                        135
Asn
145
<210> 3541
<211> 805
<212> PRT
<213> Homo sapiens
<400> 3541
Met Ala Ala Ser Gly Val Pro Arg Gly Cys Asp lle Leu lle Val Tyr
 1
                  5
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10

Ser	Pro	Asp	Ala	Lys	Glu	Trp	Cys	Gln	Tyr	Leu	Gln	Thr	Leu	Phe	Leu
			20					25					30		
Ser	Ser	Arg	Gln	Val	Arg	Ser	Gln	Lys	Пе	Leu	Thr	His	Arg	Leu	Gly
		35					40					45			
Pro	Glu	Ala	Ser	Phe	Ser	Ala	Glu	Asp	Leu	Ser	Leu	Phe	Leu	Ser	Thr
	50					55					60				
Arg	Cys	Val	Val	Val	Leu	Leu	Ser	Ala	Glu	Leu	Val	Gln	His	Phe	His
65					70					75					80
Lys	Pro	Ala	Leu	Leu	Pro	Leu	Leu	Gln	Arg	Ala	Phe	His	Pro	Pro	His
				85					90					95	
Arg	Val	Val		Leu	Leu	Cys	Gly	Val	Arg	Asp	Ser	Glu	Glu	Phe	Leu
			100					105					110		
Asp	Phe		Pro	Asp	Trp	Ala		Trp	Gln	Glu	Leu		Cys	Asp	Asp
		115					120					125			
G]u		Glu	Thr	Tyr	Va]	Λla	Ala	Val	Lys	Lys		He	Ser	Glu	Asp
_	130	_		_		135					140				
	Gly	Cys	Asp	Ser		Thr	Asp	Thr	Glu		Glu	Asp	Glu	Lys	
145			~		150	0.1				155			_	_	160
Val	Ser	Tyr	Ser		GIn	Gln	Asn	Leu		Thr	Val	Thr	Ser		Gly
		11 4	V I	165	C1	n		4	170		C	C 1	. 1	175	T.I
Asn	Leu	Met		val	GIn	Pro	Asp		He	Arg	Cys	Gly		Glu	ihr
ть	V = 1	Т	180	31.	V - 1	A	C	185	1	Λ.	4		190	4.1	TEI
inr	vai		vai	11e	vai	Arg		Lys	Leu	Аѕр	Asp		val	Ala	Inr
C1	110	195	Dlag	Con	Duo	C1	200	Con.	Duo	Can	V-1	205	Mad	C1	۸1
Gju	210	Giu	rne	261	F10	Glu 215	ASP	Ser	r10	Se1.	220	Arg	Met	Gru	Ата
lve		Glu	Aen	Glu	Tur	Thr	il.	Sor	Val	lve		Pro	Aen	Lou	Sor
225	, 41	014	ASH	,	230	1111	116	Se1	vai	235	Mia	110	nsn	Leu	240
	Glv	Asn	Val	Ser		Lys	He	Tyr	Ser		Asn	Len	Val	Val	
501	01,		7.0.1	245	77.4	12,10	.110	.,.	250	019	пор	Leu	, (1)	255	Cys
Glu	Thr	Val	11e		Tyr	Tyr	Thr	Asp		Glu	Glu	He	Glv		Leu
		-	260					265					270		200
Leu	Ser	Asn		Ala	Asn	Pro	Val		Phe	Met	Cvs	G1n		Phe	Lvs
		275				-	280					285			,
He	Val		Tyr	Asn	Thr	G1u		Leu	Asp	Lys	Leu		Thr	Glu	Ser
	290		-			295			•	•	300				

Leu 305	Lys	Asn	Asn	Ile	Pro 310	Ala	Ser	Gly	Leu	His 315	Leu	Phe	Gly	Ile	Asn 320
	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn		Arø	Asn	Glu	Glu	
0111	БСС	014	Olu	325	пор	MC C	Mot	1111	330	OIN	mg	пэр	oru	335	LCu
Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys	Asn	Leu	Thr
			340					345					350		
Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr	Ser	Val	Ala
		355					360					365			
Asn	Lys	His	Gly	His	Tyr	Pro	Asn	Thr	Ile	Ala	Glu	Lys	His	Gly	Phe
	370					375					380				
Arg	Asp	Leu	Arg	Gln	Phe	Ile	Asp	Glu	Tyr	Val	Glu	Thr	Val	Asp	Met
385					390					395					400
Leu	Lys	Ser	His	He	Lys	Glu	Glu	Leu	Met	His	Gly	Glu	Glu	Ala	Asp
				405					410					415	
Ala	Val	Tyr	Glu	Ser	Met	Ala	His	Leu	Ser	Thr	Asp	Leu	Leu	Met	Lys
			420					425					430		
Cys	Ser	Leu	Asn	Pro	Gly	Cys	Asp	Glu	Asp	Leu	Tyr	Glu	Ser	Met	Ala
		435					440					445			
Ala	Phe	Val	Pro	Ala	Ala	Thr	Glu	Asp	Leu	Tyr	Val	Glu	Met	Leu	Gln
*	450					455					460				
Ala	Ser	Thr	Ser	Asn	Pro	He	Pro	Gly	Asp	Gly	Phe	Ser	Arg	Ala	Thr
465					470					475					480
Lys	Asp	Ser	Met	He	Arg	Lys	Phe	Leu	Glu	Gly	Asn	Ser	Met	Gly	Met
				485					490					495	
Thr	Asn	Leu	Glu	Arg	Asp	Gln	Cys	His	Leu	Gly	G1n	Glu	Glu	Asp	Val
			500					505					510		
Tyr	His	Thr	Val	Asp	Asp	Asp	Glu	Ala	Phe	Ser	Val	Asp	Leu	Ala	Ser
		515					520					525			
Arg	Pro	Pro	Val	Pro	Val	Рго	Arg	Pro	Glu	Thr	Thr	Ala	Pro	Gly	Ala
	530					535					540				•
His	Gln	Leu	Pro	Asp	Asn	Glu	Pro	Tyr	He	Phe	Lys	Val	Phe	Ala	Glu
545					550					555					560
Lys	Ser	Gln	Glu	Arg	Pro	Gly	Asn	Phe	Tyr	Val	Ser	Ser	G] u	Ser	He
				565					570					575	
Arg	Lys	Gly	Pro	Pro	Val	Arg	Pro	Trp	Arg	Asp	Arg	Pro	Gln	Ser	Ser
			580					585					590		

Ile Tyr Asp Pro Phe Ala Gly Met Lys Thr Pro Gly Gln Arg Gln Leu lle Thr Leu Gln Glu Gln Val Lys Leu Gly Ile Val Asn Val Asp Glu Ala Val Leu His Phe Lys Glu Trp Gln Leu Asn Gln Lys Lys Arg Ser Glu Ser Phe Arg Phe Gln Gln Glu Asn Leu Lys Arg Leu Arg Asp Ser Ile Thr Arg Arg Gln Arg Glu Lys Gln Lys Ser Gly Lys Gln Thr Asp Leu Glu Ile Thr Val Pro Ile Arg His Ser Gln His Leu Pro Ala Lys Val Glu Phe Gly Val Tyr Glu Ser Gly Pro Arg Lys Ser Val Ile Pro Pro Arg Thr Glu Leu Arg Arg Gly Asp Trp Lys Thr Asp Ser Thr Ser Ser Thr Ala Ser Ser Thr Ser Asn Arg Ser Ser Thr Arg Ser Leu Leu Ser Val Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro Glu Val Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr Pro Thr Met Ser Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala Ser Gln Arg Pro Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val Pro Pro Arg Gly Arg

<210> 3542

<211> 296

<212> PRT

<213> Homo sapiens

<400)> 35	542													
Met	Gly	Trp	Gly	Cys	Arg	Val	Pro	Gly	Trp	Gly	Gly	Ala	Ala	Leu	Gly
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Arg	Pro	Asp	Phe	Gly	Thr	Gly	Leu	Arg	Ala	Arg	Va]	Ser	Gly	Pro	Gly
			20					25					30		
Ser	Ala	Gly	Phe	Arg	Ala	Glu	Lys	Glu	Gly	Gln	Arg	Lys	Arg	Ser	Gly
		35					40					45			
Ser	Pro	Pro	Ala	Pro	Ala	Ser	Leu	Pro	Glu	Tyr	Lys	Pro	Leu	Glu	Ala
	50					55					60				
Arg	Phe	Trp	Va]	Ala	Ala	Ala	Gln	Pro	Phe	Arg	Ser	Pro	Leu	Leu	Pro
65					70					75					80
Thr	Asp	Val	Tyr	Ser	Cys	Ser	Leu	Tyr	Phe	Ser	Leu	His	Ser	Pro	Va1
				85					90					95	
Glu	Pro	Pro	Arg	Gln	Arg	Arg	Gly	Arg	Va]	Leu	Leu	Leu	Ser	Arg	Leu
			100					105					110		
Arg	Leu		Pro	Ser	His	Pro		Ala	Gln	Glu	Glu		Arg	Ala	Arg
		115					120					125			
Pro		Asp	Gly	Arg	Ser		Gly	Leu	Leu	Leu		Arg	Ala	Leu	Pro
	130				_	135					140				
	Val	Ala	Ala	Gly		Ser	Pro	Arg	Arg		Gly	His	Ser	Pro	
145					150		_			155					160
Ala	Ala	Glu	Asn		GTy	Ser	Trp	Ala		Met	Leu	Asn	Phe		Ser
Б	T)	DI		165	61	,	T.I.	61	170		C	c		175	
Pro	Inr	Phe		Ser	GIN	Leu	Inr		Met	Cys	ser	Ser	Ser	Ala	Arg
A	D	۸1	180	A	Λ	C	Tl	185	Λ	C1	1	Λ	190	Т	1
Arg	Pro	195	Pro	Arg	Arg	261.	200	1111.	Arg	GIY	Leu	Arg 205	Asn	LÀL	Lys
Son	Lou		Pro	Pro	Ara	Cln		Cln	Clu	Ara	Ara		Ala	C1v	Ano
361	210	1115	110	110	A1 g	215	Gry	0111	Gru	AI g	220	01 y	MIG	ОТУ	AlE
Sor		Ala	Arg	Trn	Trn		Leu	Glv	Thr	Aen		Glv	Gly	Cve	Gly
225	Giy	Mid	ALI S	qti	230	014	į, c.u	Oly	111,1	235	Lys	Ory	Ory	0,5	240
	Arø	Cvs	Leu	Len		Thr	Glv	Gln	Phe		Arø	Tyr	Thr	Cvs	
0.10	6	0,0	Bed	245	0,5		019	0111	250	711 (4	8			255	.5
Leu	Ser	Asn	Leu		Arg	Asn	Pro	Val		His	Tvr	Cvs	11e		Lei
			260	0	J			265	Ü		-		270		

Arg Glu Ser Leu Thr Thr Gly Gln Thr Ser Gln Ser Ser Gln Val Val
275
Glu Met Ala Ser Asn Pro Glu Pro
290
295

<210> 3543

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3543

Met Ala Thr Ile Pro Asp Trp Lys Leu Gln Leu Leu Ala Arg Arg

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Gln Glu Glu Ala Ser Val Arg Gly Arg Glu Lys Ala Glu Arg Glu Arg
20 25 30

Leu Ser Gln Met Pro Ala Trp Lys Arg Gly Leu Leu Glu Arg Arg Arg 35 40 45

Ala Lys Leu Gly Leu Ser Pro Gly Glu Pro Ser Pro Val Leu Gly Thr
50 55 60

Val Glu Ala Gly Pro Pro Asp Pro Asp Glu Ser Ala Val Leu Leu Glu 65 70 75 80

Thr Ile Gly Pro Val His Gln Asn Arg Phe Ile Arg Gln Glu Arg Gln
85 90 95

Gl
n Gl
n Gl
n Gl
n Gl
n Gl
n Gl
n Arg Ser Glu Glu Leu Leu Ala Glu Arg
 100 $\,$ 105 $\,$ 110

Lys Pro Gly Pro Leu Glu Ala Arg Glu Arg Arg Pro Ser Pro Gly Glu 115 120 125

Met Arg Asp Gln Ser Pro Lys Gly Arg Glu Ser Arg Glu Glu Arg Leu 130 135 140

Ser Pro Arg Glu Thr Arg Glu Arg Arg Leu Gly 11e Gly Gly Ala Gln 145 150 155 160

Glu Leu Ser Leu Arg Pro Leu Glu Ala Arg Asp Trp Arg Gln Ser Pro 165 170 175

Gly Glu Val Gly Asp Arg Ser Ser Arg Leu Ser Glu Ala Trp Lys Trp 180 185 190

```
Arg Leu Ser Pro Gly Glu Thr Pro Glu Arg Ser Leu Arg Leu Ala Glu
                            200
                                                205
Ser Arg Glu Gln Ser Pro Arg Arg Lys Glu Val Glu Ser Arg Leu Ser
    210
                        215
                                            220
Pro Gly Glu Ser Ala Tyr Gln Lys Leu Gly Leu Thr Gly Ala His Lys
                    230
                                        235
                                                             240
Trp Arg Pro Asp Ser Arg Glu Ser Gln Glu Gln Ser Leu Val Gln Leu
                                    250
                245
Glu Ala Thr Glu Trp Arg Leu Arg Ser Gly Glu Glu Arg Gln Asp Tyr
            260
                                265
                                                     270
Ser Glu Glu Cys Gly Arg Lys Glu Glu Trp Pro Val Pro Gly Val Ala
                            280
                                                 285
Pro Lys Glu Thr Ala Glu Leu Ser Glu Thr Leu Thr Arg Glu Ala Gln
    290
                        295
                                             300
Gly Asn Ser Ser Ala Gly Val Glu Ala Ala Glu Gln Arg Pro Val Glu
                    310
                                        315
Asp Gly Glu Arg Gly Met Lys Pro Thr Glu Gly Trp Lys Trp Thr Leu
                325
                                    330
Ile Met Ser Leu Ala Gly Lys Gly Asn Gln His Leu Val Thr Cys Phe
            340
                                345
                                                     350
Pro His Pro Val Ser Gly Gly Arg Ala Asn Cys Pro Ile Ser Thr Leu
                            360
                                                 365
Ile Gln Ser Pro Trp Cys Gly Trp Gly
   370
                        375
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<210> 3544

<211> 1215

<212> PRT

<213> Homo sapiens

<400> 3544

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Asn	Cys	Thr	Met	Val	Leu	Leu	His	He	Val	Ser	Lys	Cys	His	Glu	Glu
		35					40					45			
Gly	Leu	Лsp	Ser	Tyr	Leu	Arg	Ser	Phe	He	Lys	Tyr	Ser	Phe	Arg	Pro
	50					55					60				
Glu	Lys	Pro	Ser	Ala	Pro	Gln	Ala	Gln	Leu	He	His	G1 u	Thr	Leu	Ala
65					70					75					80
Thr	Thr	Met	He	Ala	He	Leu	Lys	Gln	Ser	Ala	Asp	Phe	Leu	Ser	He
				85					90					95	
Asn	Lys	Leu		Lys	Tyr	Ser	Trp		Phe	Phe	Glu	He	He	Ala	Lys
			100					105					110		
Ser	Met		Thr	Tyr	Leu	Leu	Glu	Glu	Asn	Lys	He		Leu	Pro	Arg
		115				m.	120					125	~		
Gly		Arg	Phe	Pro	Glu		Tyr	His	His	Val		His	Ser	Leu	Leu
	130		7.1			135	m.				140	0.1		**	
	Ala	11e	He	Pro		Val	Thr	11e	Arg		Ala	61u	11e	Pro	
145	C	A	A	17 - 1	150	Т	C	,	۸1.	155	DI	L	1	A	160
GIU	ser	Arg	Asn		Asn	ıyr	Ser	Leu	A1a	ser	Pne	Leu	Lys	175	Cys
Lou	Tha	Lou	Mot	165	Ara	C1v	Dho	Ho		Acn	Lou	110	Acn		Tur
Leu	1111	Leu	180	лър	лгg	Gly	Phe	185	THE	лы	Leu	116	190	nsp	I y I
lle	Ser	Glv		Ser	Pro	lvs	Asp		lvs	Val	Len	Ala		Tvr	lvs
110	501	195	The	001	110	LyJ	200	110	Lys	· · · · ·	Bea	205	014	.,.	2,5
Phe	Glu		l.eu	Gln	Thr	He	Cys	Asn	His	Glu	His		He	Pro	Leu
	210		200	· · · ·		215	0,0				220	- , -			
Asn		Pro	Met	Ala	Phe		Lys	Pro	Lys	Leu		Arg	Val	Gln	Asp
225					230					235					240
Ser	Asn	Leu	Glu	Tyr	Ser	Leu	Ser	Asp	Glu	Tyr	Cys	Lys	His	His	Phe
				245					250					255	
Leu	Va]	Gly	Leu	Leu	Leu	Arg	Glu	Thr	Ser	He	Ala	Leu	Gln	Asp	Asn
			260					265					270		
Tyr	Glu	lle	Arg	Tyr	Thr	Ala	lle	Ser	Val	He	Lys	Asn	Leu	Leu	He
		275					280					285			
Lys	His	Ala	Phe	Asp	Thr	Arg	Tyr	Gln	His	Lys	Asn	Gln	Gln	Ala	Lys
	290					295					300				
He	Ala	Gln	Leu	Tyr	Leu	Pro	Phe	Val	Gly	Leu	Leu	Leu	Glu	Asn	lle
305					310					315					320

Gln	Arg	Leu	Ala	Gly	Arg	Asp	Thr	Leu	Tyr	Ser	Cys	Ala	Ala	Met	Pro
				325					330					335	
Asn	Ser	Ala	Ser	Arg	Asp	Glu	Phe	Pro	Cys	Gly	Phe	Thr	Ser	Pro	Ala
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Asn	Arg	Gly	Ser	Leu	Ser	Thr	Asp	Lys	Asp	Thr	Ala	Tyr	Gly	Ser	Phe
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Gln	Asn	Gly	His	Gly	He	Lys	Arg	Glu	Asp	Ser	Arg	Gly	Ser	Leu	He
	370					375					380				
Pro	Glu	Gly	Ala	Thr	Gly	Phe	Pro	Asp	Gln	Gly	Asn	Thr	Gly	Glu	Asn
385					390					395					400
Thr	Arg	Gln	Ser	Ser	Thr	Arg	Ser	Ser	Val	Ser	Gln	Tyr	Asn	Arg	Leu
				405					410					415	
Asp	Gln	Tyr	Glu	He	Arg	Ser	Leu	Leu	Met	Cys	Tyr	Leu	Tyr	He	Val
			420					425					430		
Lys	Met	He	Ser	Glu	Asp	Thr	Leu	Leu	Thr	Tyr	Trp	Asn	Lys	Val	Ser
		435					440					445			
Pro	Gln	Glu	Leu	Ile	Asn	Ile	Leu	Ile	Leu	Leu	Glu	Val	Cys	Leu	Phe
	450					455					460				
His	Phe	Arg	Tyr	Met	Gly	Lys	Arg	Asn	Ile	Ala	Arg	Val	His	Asp	Ala
465					470					475					480
Trp	Leu	Ser	Lys	His	Phe	Gly	He	Asp	Arg	Lys	Ser	Gln	Thr	Met	Pro
				485					490					495	
Ala	Leu	Arg	Asn	Arg	Ser	Gly	Val	Met	Gln	Ala	Arg	Leu	Gln	His	Leu
			500					505					510		
Ser	Ser	Leu	Glu	Ser	Ser	Phe	Thr	Leu	Asn	His	Ser	Ser	Thr	Thr	Thr
		515					520					525			
Glu	Ala	Asp	He	Phe	His	Gln	Ala	Leu	Leu	Glu	G1 y	Asn	Thr	Ala	Thr
	530					535					540				
Glu	Val	Ser	Leu	Thr	Val	Leu	Asp	Thr	He	Ser	Phe	Phe	Thr	Gln	Cys
545					550					555					560
Phe	Lys	Thr	Gln	Leu	Leu	Asn	Asn	Asp	Gly	His	Asn	Pro	Leu	Met	Lys
				565					570					575	
Lys	Val	Phe	Asp	He	His	Leu	Ala	Phe	Leu	Lys	Asn	Gly	Gln	Ser	Glu
			580					585					590		
Val	Ser	Leu	Lys	His	Val	Phe	Ala	Ser	Leu	Arg	Ala	Phe	He	Ser	Lys
		595					600					605			

Phe	Pro	Ser	Ala	Phe	Phe	Lys	Gly	Arg	Val	Asn	Met	Cys	Ala	Ala	Phe
	610					615					620				
Cys	Tyr	Glu	Va]	Leu	Lys	Cys	Cys	Thr	Ser	Lys	He	Ser	Ser	Thr	Arg
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Asn	Glu	Ala	Ser	Ala	Leu	Leu	Tyr	Leu	Leu	Met	Arg	Asn	Asn	Phe	Glu
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Tyr	Thr	Lys	Arg	Lys	Thr	Phe	Leu	Arg	Thr	His	Leu	Gln	He	He	He
			660					665					670		
Ala	Val	Ser	Gln	Leu	He	Ala	Asp	Val	Ala	Leu	Ser	Gly	Gly	Ser	Arg
		675					680					685			
Phe		Glu	Ser	Leu	Phe		He	Asn	Asn	Phe		Asn	Ser	Asp	Arg
	690					695		_			700				
	Met	Lys	Ala	Thr		Phe	Pro	Ala	Glu		Lys	Asp	Leu	Thr	
705			TT.	., .	710			m.		715			0.1		720
Arg	11e	Arg	Ihr		Leu	Met	Ala	lhr		GIn	Met	Lys	Glu		Glu
1	A a m	Dma	C1	725	1	11.	Λ	1	730	Т	C	1	A 1 -	735	C -
LyS	изр	Pro	740	меι	Leu	116	Asp	745	GIN	ıyr	ser	Leu	750	Lys	ser
Tyr	Ala	Ser		Pro	Glu	Lou	Ara		Thr	Trn	Lou	Acn		Mot	11 0
1 9 1	MIG	755	1111	110	01u	Leu	760	Lys	1111	пр	Leu	765	361	We L	міа
Lvs	He	His	Val	Lvs	Asn	Glv		Phe	Ser	Glu	Ala		Met	Cvs	Tvr
,-	770			2,0		775		,	501	010	780	,,,,	.no c	0,0	.,1
Val	His	Val	Ala	Ala	Leu		Ala	Glu	Phe	Leu		Arg	Lvs	Lvs	Leu
785					790					795		Ü	Ĭ	·	800
Phe	Pro	Asn	Gly	Cys	Ser	Ala	Phe	Lys	Lys	lle	Thr	Pro	Asn	lle	Asp
				805					810					815	
Glu	61u	Gly	Ala	Met	Lys	Glu	Asp	Ala	Gly	Met	Met	Asp	Val	His	Tyr
			820					825					830		
Ser	Glu	Glu	Val	Leu	Leu	Glu	Leu	Leu	Glu	Gln	Cys	Val	Asp	Gly	Leu
		835					840					845			
Trp	Lys	Ala	Glu	Arg	Tyr	Glu	He	lle	Ser	Glu	lle	Ser	Lys	Leu	lle
	850					855					860				
Val	Pro	He	Tyr	Glu	Lys	Arg	Arg	Glu	Phe	Glu	Lys	Leu	Thr	Gln	Val
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Tyr	Arg	Thr	Leu	His	Gly	Ala	Tyr	Thr	Lys	He	Leu	Glu	Val	Met	His
				885					890					895	

Thr	Lys	Lys	Arg	Leu	Leu	Gly	Thr	Phe	Phe	Arg	Val	Ala	Phe	Tyr	Gly
			900					905					910		
Gln	Ser	Phe	Phe	Glu	Glu	G]u	Asp	Gly	Lys	Glu	Tyr	Пe	Tyr	Lys	Glu
		915					920					925			
Pro	Lys	Leu	Thr	Gly	Leu	Ser	Glu	He	Ser	Leu	Arg	Leu	Val	Lys	Leu
	930					935					940				
Tyr	Gly	Glu	Lys	Phe	G1 y	Thr	Glu	Asn	Val	Lys	lle	Πle	Gln	Asp	Ser
945					950					955					960
Asp	Lys	Val	Asn	Ala	Lys	Glu	Leu	Asp	Pro	Lys	Tyr	Ala	His	He	Gln
				965					970					975	
Val	Thr	Tyr		Lys	Pro	Tyr	Phe		Asp	Lys	Glu	Leu	Thr	Glu	Arg
			980					985					990		
Lys	Thr		Phe	Glu	Arg		His	Asn	lle	Ser			Val	Phe	Glu
		995					1000	_				1005			
		Tyr	Thr	Leu			Lys	Lys	GIn			lle	Glu	Glu	Gln
	010			TI		1015	TI	T	C		1020	Di	n	T.	17 1
		Arg	Arg			Leu	Thr	lhr			Ser	Phe	Pro		
1025		A 20.00	11.		1030	Λ	C	C1		1035	T1.	A	1		1040 D
Lys	Lys	Arg		1045	116	ASII	Cys		61n 1050	GIN	116	ASN			Pro
ماا	Aen	Val			Asn	Glu	lle			Lvc	Thr	Ala		1055	Gln
110	АЗР		1060	1111	пэр	O 1 u		1065	nsp	Lys	1111		1070	Leu	OIII
lvs	l eu			Ser	Thr	Asn	Val		Met	He	Gln			Leu	Lve
.2,0		075		001			1080	пор	,ne c	110		1085	OIII	Lea	Lys
Leu			Cvs	Val	Ser		Gln	Val	Asn	Ala			Leu	Ala	Tvr
	090	•	•			095					1100				
Ala	Arg	Ala	Phe	Leu	Asn	Asp	Ser	Gln	Ala			Tyr	Pro	Pro	Lys
1105					1110					1115					1120
Lys	Val	Ser	Glu	Leu	Lys	Asp	Met	Phe	Arg	Lys	Phe	lle	Gln	Ala	Cys
]	125				1	130]	135	
Ser	lle	Λla	Leu	Glu	Leu	Λsn	Glu	Arg	Leu	He	Lys	Glu	Asp	Gln	Val
]	140]	1145]	150		
Glu	Tyr	His	Glu	Gly	Leu	Lys	Ser	Asn	Phe	Arg	Asp	Met	Val	Lys	Glu
	1	155					1160				j	165			
Leu	Ser	Asp	11e	lle	His	Glu	Gln	He	Leu	Gln	Glu	Asp	Thr	Met	His
1	170				1	175				1	180				

Ser Pro Trp Met Ser Asn Thr Leu His Val Phe Cys Ala 11e Ser Gly
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Thr Ser Ser Asp Arg Gly Tyr Gly Ser Pro Arg Tyr Ala Glu Val
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<210> 3545

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3545

Met His Tyr lle Lys Thr Trp Ser Leu Leu Gly Glu Met Ser Glu Lys

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 130
 135
 140

 Lys Glu Asn Leu Arg Lys Asp Met Glu Arg Asp Leu Lys Ala Asp Ser
 145
 150

Asn Met Pro Leu Asn Asn Ser Ser Gln Glu Val Thr Lys Asp Leu Leu 165 170 175

Asp Met lle Asp His Thr Ser lle Arg Thr lle Glu Glu Leu Ala Gly

Lys lle Glu Phe Glu Asn Glu Leu Asn His Met Cys Gly His Cys Gln Asp Ser Pro Phe Lys Glu Glu Ala Trp Ala Leu Leu Met Asp Lys Ser Pro Gln Lys Ala Thr Asp Ala Asp Pro Gly Ser Leu Lys Gln Ala Phe Asp Asp His Asn Ile Val Glu Thr Val Leu Asp Leu Glu Glu Asp Tyr Asn Val Met Thr Ser Phe Lys Tyr Gln Ile Glu

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<211> 184

<212> PRT

<213> Homo sapiens

<400> 3546

Met Gly Val Cys Arg Thr Gln Tyr Phe Val Thr Gln Val Leu Ser Leu Val Pro Ile Ser Tyr Phe Ser Trp Ser Ser Pro Phe Ser His Pro Gly Thr Lys Phe Trp Thr Gln Leu Lys Phe Ile Cys Gln Thr Leu Val Lys Leu Gly Leu Phe Pro Pro Gln Glu Ser Gly Ile Arg Asp Leu Ile Pro Gly Ser Val Ile Asp Ala Thr Met Phe Asn Pro Cys Gly Tyr Ser Met

Asn Gly Met Lys Ser Asp Gly Thr Tyr Trp Thr Ile His Ile Thr Pro

85 90 95

Glu Pro Glu Phe Ser Tyr Val Ser Phe Glu Thr Asn Leu Ser Gln Thr
100 105 110

Ser Tyr Asp Asp Leu lle Arg Lys Val Val Glu Val Phe Lys Pro Gly
115 120 125

Lys Phe Val Thr Thr Leu Phe Val Asn Gln Ser Ser Lys Cys Arg Thr

Val Leu Ala Ser Pro Gln Lys Ile Glu Gly Phe Lys Arg Leu Asp Cys Gln Ser Ala Met Phe Asn Asp Tyr Asn Phe Val Phe Thr Ser Phe Ala Lys Lys Gln Gln Gln Gln Ser <210> 3547 <211> 132 <212> PRT <213> Homo sapiens <400> 3547 Met Met Tyr Val Pro Gln Asn Gln Val Ile Leu Ser Val Leu Phe Gln Tyr Phe Phe Val Asn Leu Trp Ser Cys Ala Pro Ile Thr Thr Ile Pro lle Leu Glu Arg Leu Tyr His Phe Leu Phe Pro Ser Pro Ala Leu Cys Asn His Glu Ser Ala Phe Cys Leu Tyr Gly Phe Ala Phe Phe Arg His Leu Tyr Gln Trp Gln Leu Thr Val His Gly Leu His Ala Trp Leu Leu Ser Leu Ser 11e Leu Phe Pro Arg Phe 11e His Val Val Ala Cys Gly Ser Ala Ser Phe Leu Ser Val Ala Glu Glu Tyr Ser Ile Val Trp Thr Asp Arg Val Leu lle lle His Ser Ser Val Asp Gly His Arg Gly Cys

<210> 3548

Phe His Leu Pro

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<211> 115
<212> PRT
<213> Homo sapiens
<400> 3548
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                  5
                                     10
Leu Ile His Ala Pro Phe Cys Cys Ser Pro Leu His Ser Trp Gln Pro
             20
                                  25
                                                      30
Leu His Ser Ile His Pro Phe Pro Gln Thr Trp Ala Cys Cys Tyr Gln
                             40
                                                  45
Gln Gly Ala Val Met Asp Pro Ser Gln Gly Pro Leu Ile Pro Arg Ala
                         55
                                              60
Ser Leu Ser Leu Gly Ser Ser Ser Gln His Cys Trp Ser Gly Gly Thr
 65
                     70
                                          75
                                                              80
His Thr His Ile Phe Pro Lys Cys Tyr Gln Cys Tyr Gly Val Ile Arg
                                      90
Asn Phe Ile Tyr Leu Phe Phe Ala Asn Met Ile Ala Ile Lys Leu Pro
            100
                                 105
                                                     110
His Leu Tyr
        115
<210> 3549
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<212> PRT
<213> Homo sapiens
<400> 3549
Met Ala Ser Pro Asp Pro Pro Ala Thr Ser Tyr Ala Pro Ser Asp Val
                                      10
Pro Ser Gly Val Ala Leu Phe Leu Thr lle Pro Phe Ala Phe Phe Leu
                                 25
Pro Glu Leu lle Phe Gly Phe Leu Val Trp Thr Met Val Ala Ala Thr
```

40

His Ile Val Tyr Pro Leu Leu Gln Gly Trp Val Met Tyr Val Ser Leu

45

50 55 60 Thr Ser Phe Leu Ile Ser Leu Met Phe Leu Leu Ser Tyr Leu Phe Gly 70 75 Phe Tyr Lys Arg Phe Glu Ser Trp Arg Val Leu Asp Ser Leu Tyr His Gly Thr Thr Gly Ile Leu Tyr Met Ser Ala Ala Val Leu Gln Val His 105 Ala Thr Ile Val Ser Glu Lys Leu Leu Asp Pro Arg Ile Tyr Tyr Ile 115 120 125 Asn Ser Ala Ala Ser Phe Phe Ala Phe Ile Ala Thr Leu Leu Tyr Ile 130 135 140 Leu His Ala Phe Ser Ile Tyr Tyr His 145 150 <210> 3550 <211> 127 <212> PRT <213> Homo sapiens <400> 3550 Met Val Cys Asp Phe Thr Pro Leu Cys Leu Ile Ile Cys Gln Gln Thr 5 10 Tyr Trp Ala Lys His Lys Trp Leu Arg His Ser Trp Pro 11e Ser Cys 20 25 30 His Arg Cys His Pro Gln Arg Gln Thr Leu Gly Asn Asn Leu Gly Thr Ala Ser Ser Pro Cys Gln Val Met Ala Ser Ser Ala Ser Gln His Val 50 55 Pro Gly Leu Pro Leu Gly Ala Gly Phe Ser Ala Gly Leu Arg Asp Ser 70 75 Trp Lys Glu Pro Gln Gly Lys Val Arg Arg Ser Ser Trp Tyr Arg Leu 90 Met Thr Lys Glu Arg Thr Arg Lys Ala Ala Trp Val Trp Trp Lys Phe 100 105 110

Gln Cys Asn Val Ile Pro Ser Arg His Ile Cys Asp Ser Leu Lys

115 120 125

<210> 3551

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3551

Met Phe Thr Glu Tyr Gln Ala Leu Lys Gly Gln Asn His Pro Pro Thr
1 5 10 15

Gly Pro Ala Leu Gly Pro Gly His Pro Ala Gly Ala Gly Cys Ala Glu 20 25 30

Arg His Ala Glu Val Arg Ala Gly Ala Asp Arg Glu Cys Phe Gly Glu 35 40 45

Ala Pro Leu Tyr Pro Asn Thr Cys Cys Ile Val Cys Val Ser Leu Asn 50 55 60

Arg Val Thr Ala Ala Gly Val Val Leu Tyr Arg Glu Pro Cys Pro Arg 65 70 75 80

Ala Leu Ser Phe Pro Phe Leu His Phe Leu Phe Tyr Ala Gln Phe Ser 85 90 95

Ser Leu Gly Thr Val Leu Leu Phe Phe Ser Phe Ser Phe Pro His Leu 100 105 110

Ile Ile Phe Ile Pro

115

<210> 3552

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3552

Met Ile Cys Tyr Ser Leu Gly Leu Gln Pro Pro Leu Leu Pro Gln His

1 5 10 15

Val Leu Cys Thr Val Ala lle Leu Ser Ser Phe Gly Ser Ala Pro lle

Val Cys Ser Leu Lys Phe Leu Ala Pro Leu Ser Met Ser Ser Val Phe Arg Met Pro Phe Ser Ile Ser Ser Tyr Leu Cys Pro Ala Thr Leu His Leu Thr Ser Pro Leu Phe Lys Leu Phe 11e Ser Pro Phe Leu Thr Leu Leu Gly Phe Ser Leu Arg Pro Lys Ser Phe Leu Gln Val Leu Pro Lys Pro Pro Lys Ser Gln Leu Ile <210> 3553 <211> 153 <212> PRT <213> Homo sapiens <400> 3553 Met Pro Ser Ser Val Ala Gly Glu Thr Ser Val Leu Ala Val Pro Ser Trp Arg Asp His Ser Val Glu Pro Leu Arg Asp Pro Asn Pro Ser Asp Leu Leu Glu Asn Leu Asp Asp Ser Val Phe Ser Lys Arg His Ala Lys Leu Glu Leu Asp Glu Lys Arg Arg Lys Arg Trp Asp 11e Gln Arg 11e Arg Glu Gln Arg Ile Leu Gln Arg Leu Gln Leu Arg Met Tyr Lys Lys Lys Gly Ile Gln Glu Ser Glu Pro Glu Val Thr Ser Phe Pro Glu Pro Asp Asp Val Glu Ser Leu Met 11e Thr Pro Phe Leu Pro Val Val Ala Phe Gly Arg Pro Leu Pro Lys Leu Thr Pro Gln Asn Phe Glu Leu

Pro Trp Leu Asp Glu Arg Ser Arg Cys Arg Leu Glu He Gln Lys Lys

130 135 140
Gln Thr Pro His Arg Thr Cys Arg Lys
145 150

<210> 3554

<211> 1099

<212> PRT

<213> Homo sapiens

<400> 3554

Met Leu Arg Ser Asp Ser Glu Asn Ile Leu Thr Asn Tyr Glu Asn Gln

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Ser Arg Val Glu Thr Asn Glu Arg Ala Asn Glu Cys Ser His Ser Lys 20 25 30

Asn Ile Gln Asn Phe Pro Ser Asp Leu Ile Glu Asn Pro Ile Met Lys
35 40 45

Ser Lys Met Ser Lys Phe Tyr Gly Val Asn Glu Thr Glu Asn Glu Asp 50 55 60

Asn Thr Asn Arg Asp Ser Pro IIe Phe Asp Tyr Ser Pro Arg Leu Ser
65 70 75 80

Ala Leu Leu Ser His Asp Lys Leu Met His Ser Gln Gly Ser Phe Asn 85 90 95

Asp Thr His Thr Pro Glu Ser Asn Gly Asn Lys Cys Glu Ala Pro Ala 100 105 110

Leu Ser Phe Ser Asp Lys Thr Met Leu Ser Gly Gln Arg 11e Gly Glu
115 120 125

Lys Phe Gln Asp Gln Phe Leu Gly 11e Ala Ala Ile Asn 11e Ser Leu 130 135 140

Pro Gly Glu Gln Tyr Gly Gln Lys Ser Leu Asn Met 11e Ser Ser Asn 145 150 155 160

Pro Gln Val Gln Tyr His Asn Asp Lys Tyr lle Ser Asn Thr Ser Gly
165 170 175

Glu Asp Glu Lys Thr His Pro Gly Phe Gln Gln Met Pro Glu Asp Lys 180 185 190

Glu Asp Glu Ser Glu 11e Glu Glu Tyr Ser Cys Ala Val Thr Pro Gly

		195					200					205			
Gly	Asp	Thr	Asp	Asn	Ala	Ile	Val	Ser	Leu	Thr	Cys	Ala	Thr	Pro	Leu
	210					215					220				
Leu	Asp	Glu	Thr	lle	Ser	Ala	Ser	Asp	Tyr	Glu	Thr	Ser	Leu	Leu	Asn
225					230					235					240
Asp	Gln	Gln	Asn	Asn	Thr	Gly	Thr	Asp	Thr	Asp	Ser	Asp	Asp	Asp	Phe
				245					250					255	
Tyr	Asp	Thr	Pro	Leu	Phe	Glu	Asp	Asp	Asp	His	Asp	Ser	Leu	Leu	Leu
			260					265					270		
Asp	Gly	Asp	Asp	Arg	Asp	Cys	Leu	His	Pro	Glu	Asp	Tyr	Asp	Thr	Leu
		275					280					285			
Gln	Glu	Glu	Asn	Asp	Glu	Thr	Ala	Ser	Pro	Ala	Asp	Val	Phe	Tyr	Asp
	290					295					300				
	Ser	Lys	Glu	Asn		Asn	Ser	Met	Val	Pro	Gln	Gly	Ala	Pro	
305					310					315					320
Gly	Ser	Leu	Ser		Lys	Asn	Lys	Ala		Cys	Leu	Gln	Asp		Leu
				325					330					335	_
Met	Asp	Val		Lys	Asp	Glu	Leu		Ser	Gly	Glu	Lys		His	Leu
	D	17 1	340	6			37 3	345	6.1	0.1	6		350	<i>m</i> :	0.1
Asn	Pro		GIY	Ser	Asp	Lys		Asn	Gly	GIn	Ser		Glu	Ihr	61 y
C	C1	355	C1	C	ть	Λ	360	1	C1	C1	۸	365	C	Δ	C .
ser	370	Arg	GIU	Cys	ınr	Asn 375	116	Leu	610	GIY		Glu	ser	Asp	ser
Lau		Acn	Tyr	Aen	По	Val	Gly	Glv	Lve	Glu	380 Sor	Pho	Thr	Ala	Sor
385	1111	nsh	1 9 1	nsp	390	vai	G.I.Y	013	Lys	395	361	1116	1111	пта	400
	lvs	Phe	Asn	Asn		G1y	Ser	Trn	Arø		Arø	lvs	Glu	Glu	
1300	2,5	1110	пор	405	501	01,	501	11 p		O1 y		Lyo	Old	415	-
Val	Thr	Gly	Gln	Glu	Phe	His	Ser	Asp	Thr	Asp	His	Leu	Asp		
		-	420					425		•			430		
Gln	Ser	G]u	Glu	Ser	Tyr	Gly	Asp		He	Tyr	Asp	Ser	Asn	Asp	G1n
		435					440					445			
Asp	Asp	Asp	Asp	Asp	Asp	G1y	He	Asp	Glu	Glu	Gly	Gly	Gly	He	Arg
	450					455					460				
Asp	Glu	Asn	G1 y	Lys	Pro	Arg	Cys	Gln	Asn	Val	Ala	Glu	Asp	Met	Asp
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He	Gln	Leu	Cvs	Ala	Ser	11e	Leu	Asn	Glu	Asn	Ser	Asn	Glu	Asn	Glu

				485					490					495	
Asn	He	Asn	Thr	Met	He	Leu	Leu	Asp	Lys	Val	His	Ser	Cys	Ser	Ser
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Leu	Glu	Lys	Gln	Gln	Arg	Val	Asn	Val	Val	Gln	Leu	Ala	Ser	Pro	Ser
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Glu	Asn	Asn	Leu	Val	Thr	Glu	Lys	Ser	Asn	Leu	Pro	Glu	Tyr	Thr	Thr
	530					535					540				
Glu	He	Ala	Gly	Lys	Ser	Lys	Glu	Asn	Leu	Leu	Asn	His	Glu	Met	Val
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Leu	Lys	Asp	Val	Leu	Pro	Pro	Ile	Ile	Lys	Asp	Thr	Glu	Ser	Glu	Lys
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Thr	Phe	Gly	Pro	Ala	Ser	lle	Ser	His	Asp	Asn	Asn	Asn	lle	Ser	Ser
			580					585					590		
Thr	Ser	Glu	Leu	Gly	Thr	Asp	Leu	Ala	Asn	Thr	Lys	Val	Lys	Ļeu	He
		595					600					605			
Gln	Gly	Ser	Glu	Leu	Pro	Glu	Leu	Thr	Asp	Ser	Val	Lys	Gly	Lys	Asp
	610					615					620				
	Tyr	Phe	Lys	Asn		Thr	Pro	Lys	Val		Ser	Ser	Leu	Asp	
625					630					635					640
lle	He	Cys	Thr		Pro	Asp	Leu	He		Lys	Pro	Ala	Glu	Glu	Ser
				645				mı	650			Б	6.1	655	
His	Leu	Ser		He	Ala	Ser	Val		Asp	Lys	Asp	Pro		G1 y	Asn
C 1	c		660			C1		665	61		C		670		7.1
61y	Ser		Leu	11e	Lys	ыу		Asp	Gly	Lys	Ser		11e	Leu	116
Clu	Aan	675	Thr	Con	110	Cl _n	680	Mot	Tym	Lou	C1	685	C1	Clu	Vo.1
GIU		Giu	Inr	ser	116	695	Lys	мет	Lyr	Leu	700	Glu	Gry	Glu	vai
Lou	690 Val	Clu	C1v	Lou	Val		Glu	Glu	Acn	Δια		Lou	Lve	Leu	Lou
705	vai	UIU	Gly	Leu	710	Olu	Ulu	uto	ЛЗП	715	1115	Leu	Lys	Leu	720
	G1v	Lve	Aen	Thr		Asn	Ser	Phe	lve		He	Asn	Ser	Gln	
110	Oly	Lys	11311	1111	11.1 5	пор	561	, 110		Lcu	,1 1 C	11311	501		riic
				725										735	
Pro	Phe	Pro	Gln	725 11e	Thr	Asn	Asn	Glu	730 Glu	Łeu	Asn	Gln	Lvs	735 61 v	Ser
Pro	Phe	Pro			Thr	Asn	Asn			Leu	Asn	G]n		735 Gly	Ser
			740	lle				745	Glu				750		

lle	He	Val	Ser	Lys	Ser	Pro	Val	Gln	Phe	Glu	Asn	Leu	Glu	Glu	He
	770					775					780				
Phe	Asp	Thr	Ser	Val	Ser	Lys	Glu	He	Ser	Asp	Asp	He	Thr	Ser	Asp
785					790					795					800
Пe	Thr	Ser	Trp	Glu	Gly	Asn	Thr	His	Phe	Glu	Glu	Ser	Phe	Thr	Λsp
				805					810					815	
G1 y	Pro	Glu	Lys	Glu	Leu	Asp	Leu	Phe	Thr	Tyr	Leu	Lys	His	Cys	Ala
			820					825					830		
Lys	Asn	Ile	Lys	Ala	Lys	Asp	Val	Ala	Lys	Pro	Asn	Glu	Asp	Val	Pro
		835					840					845			
Ser	His	Val	Leu	Ile	Thr	Ala	Pro	Pro	Met	Lys	Glu	His	Leu	Gln	Leu
	850					855					860				
Gly	Val	Asn	Asn	Thr	Lys	Glu	Lys	Ser	Thr	Ser	Thr	Gln	Lys	Asp	Ser
865					870					875					880
Pro	Leu	Asn	Asp	Met	Ile	Gln	Ser	Asn	Asp	Leu	Cys	Ser	Lys	Glu	Ser
				885					890					895	
He	Ser	Gly	Gly	Gly	Thr	Glu	Ile	Ser	Gln	Phe	Thr	Pro	Glu	Ser	He
			900					905					910		
Glu	Ala	Thr	Leu	Ser	Ile	Leu	Ser	Arg	Lys	His	Val	Glu	Asp	Val	Gly
		915					920					925			
Lys	Asn	Asp	Phe	Leu	Gln	Ser	Glu	Arg	Cys	Ala	Asn	Gly	Leu	Gly	Asn
	930					935					940				
Asp	Asn	Ser	Ser	Asn	Thr	Leu	Asn	Thr	Asp	Tyr	Ser	Phe	Leu	Glu	He
945					950					955					960
Asn	Asn	Lys	Lys	Glu	Arg	He	Glu	Gln	Gln	Leu	Pro	Lys	Glu	Gln	Ala
				965					970					975	
Leu	Ser	Pro	Arg	Ser	Gln	Glu	Lys	Glu	Val	Gln	He	Pro	G1u	Leu	Ser
			980					985					990		
Gln	Val	Phe	Val	Glu	Asp	Val	Lys	Asp	He	Leu	Lys	Ser	Arg	Leu	Lys
		995					1000					1005			
Glu	Gly	His	Met	Lys	Pro	Gln	Glu	Val	Glu	Glu	Pro	Ser	Ala	Cys	Ala
	1010					1015					1020				
Asp	Thr	Lys	He	Leu	He	Gln	Asn	Leu	lle	Lys	Arg	11e	Thr	Thr	Ser
1025	5				1030					1035					1040
Gln	Leu	Val	Asn	Glu	Ala	Ser	Thr	Val	Pro	Ser	Asp	Ser	Gln	Met	Ser
				1045					1050					1055	

Asp Ser Ser Gly Val Ser Pro Met Thr Asn Ser Ser Glu Leu Lys Pro

1060 1065 1070

Glu Ser Arg Asp Asp Pro Phe Cys Ile Gly Asn Leu Lys Ser Glu Leu

1075 1080 1085

Leu Leu Asn Ile Leu Lys Gln Asp Gln His Ser

1090 1095

<210> 3555

<211> 265

<212> PRT

<213> Homo sapiens

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Ser Gln Gly Ala Ala Glu Pro Met Gly Gln Gln Tyr Tyr Pro Asp Gly
130
135
140
His Gly Asp Tyr Ala Tyr Gln Gln Ser Ser Tyr Thr Glu Gln Ser Tyr

145 150 155 160
Asp Arg Ser Phe Glu Glu Ser Thr Gln His Tyr Tyr Glu Gly Gly Asn
165 170 175

Ser Gln Tyr Ser Gln Gln Gln Ala Gly Tyr Gln Gln Gly Ala Ala Gln Gln Gln Thr Tyr Ser Gln Gln Gln Tyr Pro Ser Gln Gln Ser Tyr Pro Gly Gln Gln Gln Gly Tyr Gly Ser Ala Gln Gly Ala Pro Ser Gln Tyr Pro Gly Tyr Gln Gln Gly Gln Gln Gln Tyr Gly Ser Tyr Arg Ala Pro Gln Thr Ala Pro Ser Ala Gln Gln Gln Arg Pro Tyr Gly Tyr Glu Gln Gly Gln Tyr Gly Asn Tyr Gln Gln

<210> 3556

<211> 133

<212> PRT

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Met Phe Ser Tyr Glu Lys Tyr Thr Leu Phe Ile Leu Ser Ser Ser Phe Phe Phe Phe Phe Arg Trp Ser Leu Ala Leu Val Thr Gln Ala Gly Val Gln Trp Arg Asn Leu Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Arg Phe Ser Cys Ser Ser Leu Pro Tyr Ser Trp Asp Tyr Arg Cys Leu Pro Pro Cys Pro Ala Asn Phe Cys Val Phe Ser Arg Asp Gly Val Ser Pro His Arg Pro Gly Ser Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Leu Ala Ser Leu Asn Thr Gly 11e Thr Gly Val Ser His Cys 11e

Arg Pro His Phe Val Phe Phe Asn Ser Val Ile Gly Ile Ser Phe Phe

Phe Phe Phe Asn Val <210> 3557 <211> 309 <212> PRT <213> Homo sapiens <400> 3557 Met Ser Ser Cys Gln Gly Ser Leu His Gly Pro Arg Arg Pro Gln Pro Gly Ala Ser Gly Arg Ser Thr His Thr Asp Gly Gly Ser Ser Pro Ala Gly Glu Gln Glu Pro Ser Gln His Arg Thr Gly Ala Ala Val Gln Arg Lys Pro Trp Pro Ser Gly Gly Leu Trp Arg Gln Asp Gln Gln Pro Gly Pro Gly Glu Ala Pro His Thr Gln Ala Phe Gly Glu Trp Pro Trp Gly Gln Glu Leu Gly Ser Arg Ala Pro Gly Leu Gly Gly Asp Ala Gly Ser Pro Ala Pro Pro Phe His Ser Ser Ser Tyr Arg Ile Ser Leu Ala Gly Val Glu Pro Ser Leu Val Gln Ala Ala Leu Gly Gln Leu Val Arg Leu Ser Cys Ser Asp Asp Thr Ala Pro Glu Ser Gln Ala Ala Trp Gln Lys Asp Gly Gln Pro 11e Ser Ser Asp Arg His Arg Leu Gln Phe Asp Gly Ser Leu Ile Ile His Pro Leu Gln Ala Glu Asp Ala Gly Thr Tyr

Ser Cys Gly Ser Thr Arg Pro Gly Arg Asp Ser Gln Lys Ile Gln Leu

Arg Ile Ile Gly Gly Asp Met Ala Val Leu Ser Glu Ala Glu Leu Ser

	195					200					205			
Arg Phe	Pro	Gln	Pro	Arg	Asp	Pro	Ala	Gln	Asp	Phe	Gly	Gln	Ala	Gly
210					215					220				
Ala Ala	Gly	Pro	Leu	Gly	Ala	11e	Pro	Ser	Ser	His	Pro	Gln	Pro	Ala
225			•	230					235					240
Asn Arg	Leu	Arg	Leu	Asp	Gln	Asn	Gln	Pro	Arg	Val	Val	Asp	Ala	Ser
			245					250					255	
Pro Gly	Gln	Arg	He	Arg	Met	Thr	Cys	Arg	Ala	Glu	Gly	Phe	Pro	Pro
		260					265					270		
Pro Ala	Ile	Glu	Trp	Gln	Arg	Asp	Gly	Gln	Pro	Val	Ser	Ser	Pro	Ser
	275					280					285			
Thr His	Arg	Pro	Ala	Gln	Gly	Pro	Trp	Gln	Gly	Leu	Arg	Arg	Pro	Ala
290					295					300				
Arg Ala	Gly	Gln	Leu											
305														
<210> 3														
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<212> P														
<213> H	omo	sapi	ens											
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Met Pro		Thr	Lau	Trn	Mot	Val	Trn	Val	Lou	C1v	Val	Ha	Tlo	Sar
1	1115	1 111	5	dri	sie t	101	пр	10	Leu	Oly	101	116	15	361
Leu Ser	Lve	Glu		Ser	Ser	Asn	Gln		Ser	Leu	Ser	Cvs		Aro
Ecu Dei	Lys	20	Olu	561	001	11511	25	nia	501	LCu	JCI	30	пор	m 8
Asn Gly	He		Lvs	Glv	Ser	Ser		Ser	Leu	Asn	Ser		Pro	Ser
non ory	35	0,0	12,0	01,	501	40	01)	001	Lea	71511	45	,	110	561
Gly Leu		Glu	Ala	Val	Lvs		Leu	Asp	Leu	Ser		Ásn	Arg	He
50		0.0			55	20,	.,,,	,	200	60				
Thr Tyr		Ser	Asn	Ser		Leu	Gln	Arg	Cvs		Asn	Leu	Gln	Ala
65				70	- 12			. 3	75					80
Leu Val	Leu	Thr	Ser		Gly	11e	Asn	Thr		Glu	Glu	Asp	Ser	
			85		Ĭ			90				•	95	

Ser Ser Leu Gly Ser Leu Glu His Leu Asp Leu Ser Tyr Asn Tyr Leu

			100					105					110		
Ser	Asn	Leu	Ser	Ser	Ser	Trp	Phe	Lys	Pro	Leu	Ser	Ser	Leu	Thr	Phe
		115					120					125			
Leu	Asn	Leu	Leu	Gly	Asn	Pro	Tyr	Lys	Thr	Leu	Gly	Glu	Thr	Ser	Leu
	130					135					140				
Phe	Ser	His	Leu	Thr	Lys	Leu	Gln	He	Leu	Arg	Val	Gly	Asn	Met	Asp
145					150					155					160
Thr	Phe	Thr	Lys	Ile	Gln	Arg	Lys	Asp	Phe	Ala	Gly	Leu	Thr	Phe	Leu
				165					170					175	
Glu	Glu	Leu	Glu	lle	Asp	Ala	Ser	Asp	Leu	Gln	Ser	Tyr	Glu	Pro	Lys
			180					185					190		
Ser	Leu	Lys	Ser	lle	Gln	Asn	Val	Ser	His	Leu	He	Leu	His	Met	Lys
		195					200					205			
Gln	His	He	Leu	Leu	Leu	Glu	11e	Phe	Val	Asp	Val	Thr	Ser	Ser	Val
	210					215					220				
Glu	Cys	Leu	Glu	Leu	Arg	Asp	Thr	Asp	Leu	Asp	Thr	Phe	His	Phe	Ser
225					230					235					240
G] u	Leu	Ser	Thr	Gly	Glu	Thr	Asn	Ser	Leu	Ile	Lys	Lys	Phe	Thr	Phe
				245					250					255	
Arg	Asn	Val	Lys	lle	Thr	Asp	Glu	Ser	Leu	Phe	Gln	Val	Met	Lys	Leu
			260					265					270		
Leu	Asn	Gln	He	Ser	Gly	Leu	Leu	Glu	Leu	Glu	Phe	Asp	Asp	Cys	Thr
		275					280					285			
Leu		Gly	Val	G]y	Asn	Phe	Arg	Ala	Ser	Asp		Asp	Arg	Val	He
	290					295					300				
	Pro	Gly	Lys	Val		Thr	Leu	Thr	He		Arg	Leu	His	lle	
305					310			_		315		_			320
Arg	Phe	Tyr	Leu		Tyr	Asp	Leu	Ser		Leu	Tyr	Ser	Leu		Glu
				325					330			P31		335	
Arg	Val	Lys		He	Thr	Val	Glu		Ser	Lys	Val	Phe		Val	Pro
C)		,	340	0.1		,	,	345	,	61	T.	,	350		0
Cys	Leu		Ser	GIn	His	Leu	Lys	Ser	Leu	61u	iyr		Asp	Leu	Ser
C.I	,	355		V 1	C.	C 3	360		1.		c	365	C.	C1	4
61u		Leu	Met	val	61u		Tyr	Leu	Lys	Asn		Ala	Cys	61u	Asp
A 1 =	370	D	C	1	C1	375	Lou	т1.	1	Λ	380	100	มะะ	l err	Λ1 =

385					390					395					400
Ser	Leu	Glu	Lys	Thr	Gly	Glu	Thr	Leu	Leu	Thr	Leu	Lys	Asn	Leu	Thr
				405					410					415	
Asn	He	Asp	He	Ser	Lys	Asn	Ser	Phe	His	Ser	Met	Pro	Glu	Thr	Cys
			420					425					430		
Gln	Trp	Pro	Glu	Lys	Met	Lys	Tyr	Leu	Asn	Leu	Ser	Ser	Thr	Arg	He
		435					440					445			
His	Ser	Val	Thr	Gly	Cys	He	Pro	Lys	Thr	Leu	Glu	11e	Leu	Asp	Val
	450					455					460				
Ser	Asn	Asn	Asn	Leu	Asn	Leu	Phe	Ser	Leu	Asn	Leu	Pro	Gln	Leu	Lys
465					470					475					480
Glu	Leu	Tyr	lle	Ser	Arg	Asn	Lys	Leu	Met	Thr	Leu	Pro	Asp	Ala	Ser
				485					490					495	
Leu	Leu	Pro	Met	Leu	Leu	Va]	Leu	Lys	He	Ser	Arg	Asn	Ala	Пе	Thr
			500					505					510		
Thr	Phe	Ser	Lys	Glu	Gln	Leu	Asp	Ser	Phe	His	Thr	Leu	Lys	Thr	Leu
		515					520					525			
Glu	Ala	Gly	Gly	Asn	Asn	Phe	Ile	Cys	Ser	Cys	Glu	Phe	Leu	Ser	Phe
	530					535					540				
Thr	Gln	Glu	Gln	Gln	Ala	Leu	Ala	Lys	Val	Leu	Ile	Asp	Trp	Pro	Ala
545					550					555					560
Asn	Tyr	Leu	Cys	Asp	Ser	Pro	Ser	His	Val	Arg	Gly	Gln	Gln	Val	Gln
				565					570					575	
Asp	Val	Arg	Leu	Ser	Val	Ser	Glu	Cys	His	Arg	Thr	Ala	Leu	Val	Ser
			580					585					590		
G] y	Met	Cys	Cys	Ala	Leu	Phe	Leu	Leu	He	Leu	Leu	Thr	Gly	Val	Leu
		595					600					605			
Cys	His	Arg	Phe	His	Gly	Leu	Trp	Tyr	Met	Lys	Met	Met	Trp	Ala	Trp
	610					615					620				
Leu	G1n	Ala	Lys	Arg	Lys	Pro	Arg	Lys	Ala	Pro	Ser	Arg	Asn	lle	Cys
625					630					635					640
Tyr	Asp	Ala	Phe	Val	Ser	Tyr	Ser	Glu	Arg	Asp	Ala	Tyr	Trp	Val	Glu
				645					650					655	
Asn	Leu	Met	Val	Gln	Glu	Leu	Glu	Asn	Phe	Asn	Pro	Pro	Phe	Lys	Leu
			660					665					670		
Cvs	Leu	His	Lvs	Arg	Asp	Phe	He	Pro	Glv	Lvs	Tro	He	He	Asp	Asn

lle lle Asp Ser lle Glu Lys Ser His Lys Thr Val Phe Val Leu Ser Glu Asn Phe Val Lys Ser Glu Trp Cys Lys Tyr Glu Leu Asp Phe Ser His Phe Arg Leu Phe Asp Glu Asn Asn Asp Ala Ala Ile Leu Ile Leu Leu Glu Pro Ile Glu Lys Lys Ala Ile Pro Gln Arg Phe Cys Lys Leu Arg Lys Ile Met Asn Thr Lys Thr Tyr Leu Glu Trp Pro Met Asp Glu Ala Gln Arg Glu Gly Phe Trp Val Asn Leu Arg Ala Ala 11e Lys Ser <210> 3559 <211> 289 <212> PRT <213> Homo sapiens <400> 3559 Met Lys Asp Arg Leu Glu Gln Leu Lys Ala Lys Gln Leu Thr Gln Asp Asp Asp Thr Asp Ala Val Glu Ile Ala Ile Asp Asn Thr Ala Phe Met Asp Glu Phe Phe Ser Glu Ile Glu Glu Thr Arg Leu Asn lle Asp Lys lle Ser Glu His Val Glu Glu Ala Lys Lys Leu Tyr Ser Ile Ile Leu Ser Ala Pro 11e Pro Glu Pro Lys Thr Lys Asp Asp Leu Glu Gln Leu Thr Thr Glu IIe Lys Lys Arg Ala Asn Asn Val Arg Asn Lys Leu Lys

Ser Met Glu Lys His Ile Glu Glu Asp Glu Val Arg Ser Ser Ala Asp

Leu Arg Ile Arg Lys Ser Gln His Ser Val Leu Ser Arg Lys Phe Val Glu Val Met Thr Lys Tyr Asn Glu Ala Gln Val Asp Phe Arg Glu Arg 130 135 140 Ser Lys Gly Arg 11e Gln Arg Gln Leu Glu 11e Thr Gly Lys Lys Thr 150 155 160 Thr Asp Glu Glu Leu Glu Glu Met Leu Glu Ser Gly Asn Pro Ala Ile 170 165 Phe Thr Ser Gly Ile Ile Asp Ser Gln Ile Ser Lys Gln Ala Leu Ser 180 185 190 Glu lle Glu Gly Arg His Lys Asp Ile Val Arg Leu Glu Ser Ser Ile 200 205 Lys Glu Leu His Asp Met Phe Met Asp Ile Ala Met Leu Val Glu Asn 210 215 Gln Gly Glu Met Leu Asp Asn Ile Glu Leu Asn Val Met His Thr Val 230 235 Asp His Val Glu Lys Ala Arg Asp Glu Thr Lys Lys Ala Val Lys Tyr 245 250 Gln Ser Gln Ala Arg Lys Lys Leu Ile Ile Ile Ile Val Leu Val Val 270 260 265 Val Leu Leu Gly 11e Leu Ala Leu 11e 11e Gly Leu Ser Val Gly Leu 275 280 285 Asn

<210> 3560

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3560

Met Ser Ile Tyr Leu Cys Thr Tyr Met Ala Tyr Phe Ser Thr Gly Ile

1 5 10 15

Gln Tyr 11e 11e Val Ala Ser Gly Leu Ser Glu Ala Ser Phe Thr His

			20					25					30		
Ser	He	Ser		Leu	Phe	Tyr	Lvs		Ser	Lvs	Pro	Thr		Phe	Lvs
		35				Ĭ	40			•		45			J
Asn	Phe	Leu	Leu	Leu	Leu	Phe	Leu	Leu	Leu	Leu	Gly	Arg	Ser	Leu	Ala
	50					55					60				
Leu	Ser	Pro	Arg	Leu	Glu	Cys	Ala	Val	Ser	Ala	His	Cys	Lys	Leu	His
65					70					75					80
Phe	Pro	Gly	Ser	Arg	His	Phe	Pro	Ala	Ser	Ala	Ser	Gln	Ala	Ala	G1 y
				85					90					95	
Thr	Ala	Gly	Ala	Arg	His	His	Ala	Arg	Leu	He	Phe	Cys	He	Phe	G1 y
			100					105					110		
Gly	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Ser	Pro	Asp
		115					120					125			
Leu	Val	He	Trp	Ser	Arg	Ser	Pro	Asp	Leu	Met	Пе	Cys	Leu	Pro	
	130					135					140				
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<211> 1229

<212> PRT

<213> Homo sapiens

<400> 3561

Met Met Leu Asn Gly Ala Asp Ala Val His Phe Arg Val Leu Met Lys 5 10 1 15

Leu Phe Ile Lys Val His Leu Glu Asp Val Phe Gln Leu Phe Lys Phe 25

Cys Ser Val Leu Trp Thr Tyr Gly Ser Ser Leu Ser Asn Pro Leu Asn 35 40 45

Cys Ser Val Lys Thr Val Leu Gln Thr Gln Ala Leu Tyr Val Gly Cys 50 55

Ala Met Leu Ser Ser Gln Lys Thr Gln Cys Lys His Gln Leu Ala Ser 70 75

lle Ser Ser Pro Val Val Thr Ser Leu Leu lle Asn Leu Gly Ser Pro 85 95

Val Lys Glu Val Arg Arg Ala Ala Ile Gln Cys Leu Gln Ala Leu Ser

			100					105					110		
Gly	Val	Ala	Ser	Pro	Phe	Tyr	Leu	He	He	Asp	His	Leu	Пe	Ser	Lys
		115					120					125			
Ala	Glu	Glu	He	Thr	Ser	Asp	Ala	Ala	Tyr	Val	He	Gln	Asp	Leu	Ala
	130					135					140				
Thr	Leu	Phe	Glu	Glu	Leu	Gln	Arg	Glu	Lys	Lys	Leu	Lys	Ser	His	Gln
145					150					155					160
Lys	Leu	Ser	Glu	Thr	Leu	Lys	Asn	Leu	Leu	Ser	Cys	Val	Tyr	Ser	Cys
				165					170					175	
Pro	Ser	Tyr	He	Ala	Lys	Asp	Leu	Met	Lys	Val	Leu	Gln	Gly	Val	Asn
			180					185					190		
Gly	Glu	lle	Thr	Lys	Pro	Phe	Phe	Ala	Ala	He	Ser	Asp	Glu	Lys	Val
		195					200					205			
Gln	Gln	Lys	Leu	Leu	Arg	Met	Leu	Phe	Asp	Leu	Leu	Val	Asn	Cys	Lys
	210					215					220				
Asn	Ser	His	Cys	Ala	Gln	Thr	Val	Ser	Ser	Val	Phe	Lys	Gly	lle	Ser
225					230					235					240
Val	Asn	Ala	Glu	Gln	Val	Arg	lle	Glu	Leu	Glu	Pro	Pro	Asp	Lys	Ala
				245					250					255	
Lys	Pro	Leu	Gly	Thr	Val	Gln	Gln	Lys	Arg	Arg	Gln	Lys	Met	Gln	Gln
			260					265					270		
Lys	Lys	Ser	Gln	Asp	Leu	Glu	Ser	Val	Gln	Glu	Val	Gly	Gly	Ser	Tyr
		275					280					285			
Trp	Gln	Arg	Val	Thr	Leu	He	Leu	Glu	Leu	Leu	Gln	His	Lys	Lys	Lys
	290					295					300				
Leu	Arg	Ser	Pro	Gln	lle	Leu ·	Val	Pro	Thr	Leu	Phe	Asn	Leu	Leu	Ser
305					310					315					320
Arg	Cys	Leu	G] u	Pro	Leu	Pro	Gln	Glu	Gln	Gly	Asn	Met	Glu	Tyr	Thr
				325					330					335	
Lys	Gln	Leu		Leu	Ser	Cys	Leu		Asn	He	Cys	Gln		Leu	Ser
			340					345					350		
Pro	Asp		Gly	Lys	lle	Pro	Lys	Asp	He	Leu	Asp		G] u	Lys	Phe
		355					360					365			
Asn		Glu	Leu	He	Val		Cys	He	Arg	Leu		Glu	Met	Pro	Gln
m.	370					375					380				
Thr	His	His	His	Ala	Leu	Leu	Leu	Leu	Gly	Thr	Val	Ala	Gly	He	Phe

385					390					395					400
Pro	Asp	Lys	Val	Leu	His	Asn	He	Met	Ser	lle	Phe	Thr	Phe	Met	Gly
				405					410					415	
Ala	Asn	Val	Met	Arg	Leu	Asp	Asp	Thr	Tyr	Ser	Phe	Gln	Va1	He	Asn
			420					425					430		
Lys	Thr	Val	Lys	Met	Val	lle	Pro	Ala	Leu	11e	Gln	Ser	Asp	Ser	Gly
		435					440					445			
Asp	Ser	Ile	Glu	Val	Ser	Arg	Asn	Val	Glu	Glu	11e	Val	Val	Lys	He
	450					455					460				
Ile	Ser	Val	Phe	Val	Asp	Ala	Leu	Pro	His	Val	Pro	Glu	His	Arg	Arg
465					470					475					480
Leu	Р́го	Ile	Leu	Val	Gln	Leu	Val	Asp	Thr	Leu	Gly	Ala	Glu	Lys	Phe
				485					490					495	
Leu	Trp	lle	Leu	Leu	lle	Leu	Leu	Phe	Glu	Gln	Tyr	Val	Thr	Lys	Thr
			500					505					510		
Val	Leu	Ala	Ala	Ala	Tyr	G1 y	Glu	Lys	Asp	Ala	He	Leu	Glu	Ala	Asp
		515					520					525			
Thr	Glu	Phe	Trp	Phe	Ser	Val	Cys	Cys	Glu	Phe	Ser	Val	Gln	His	Gln
	530					535					540				
He	Gln	Ser	Leu	Met	Asn	lle	Leu	Gln	Tyr	Leu	Leu	Lys	Leu	Pro	Glu
545					550					555					560
G1u	Lys	Glu	Glu	Thr	He	Pro	Lys	Ala	Val	Ser	Phe	Asn	Lys	Ser	Glu
				565					570					575	
Ser	Gln	Glu		Met	Leu	Gln	Val	Phe	Asn	Va]	Glu	Thr	His	Thr	Ser
			580					585					590		
Lys	Gln		Arg	His	Phe	Lys		Leu	Ser	Val	Ser		Met	Ser	Gln
		595	_				600					605			
Leu		Ser	Ser	Asn	Asn	Phe	Leu	Lys	Lys	Val		Glu	Ser	G] y	Gly
	610	~ .			0.7	615					620				
	Glu	He	Leu	Lys		Leu	GJu	Glu	Arg		Leu	G]u	Thr	Val	
625	T	7:1	C	. 1	630		6.1	C		635					640
61 у	ıyr	11e	Ser		vai	Ala	Gin	Ser		61u	Arg	Asn	Ala		Lys
1	ть	V . 1	1	645	т		4.7		650	C		4.3	т	655	
Leu	ınr	ısv		rne	ırp	Arg	Ala		Leu	5er	Lys	AIA		Asp	Leu
Leu	Acn	Lve	660 Val	Acs	A 1 a	Leu	1	665 Pro	The	C1	ТЬ	Dha	670	Dag e	V = 1
LCU	non	LVD	val	$\alpha_{\rm SH}$	α α	Leu	LEU	110	1111	OIU	1111	1.116	116,	-	111

		675					680					685			
Ile	Arg	Gly	Leu	Val	Gly	Asn	Pro	Leu	Pro	Ser	Val	Arg	Arg	Lys	Ala
	690					695					700				
Leu	Asp	Leu	Leu	Asn	Asn	Lys	Leu	Gln	Gln	Asn	lle	Ser	Trp	Lys	Lys
705					710					715					720
Thr	He	Val	Thr	Arg	Phe	Leu	Lys	Leu	Val	Pro	Asp	Leu	Leu	Ala	He
				725					730					735	
Val	Gln	Arg	Lys	Lys	Lys	Glu	Gly	Glu	Glu	Glu	Gln	Ala	lle	Asn	Arg
			740					745					750		
Gln	Thr	Ala	Leu	Tyr	Thr	Leu	Lys	Leu	Leu	Cys	Lys	Asn	Phe	Gly	Ala
		755					760					765			
Glu	Asn	Pro	Asp	Pro	Phe	Val	Pro	Val	Leu	Asn	Thr	Ala	Val	Lys	Leu
	770					775					780				
He	Ala	Pro	Glu	Arg	Lys	Glu	Glu	Lys	Asn	Val	Leu	Gly	Ser	Ala	Leu
785					790					795					800
Leu	Cys	lle	Ala		Val	Thr	Ser	Thr		Glu	Ala	Leu	Ala		Pro
				805					810					815	
Gln	Leu	Pro		Leu	Met	Pro	Pro		Leu	Thr	Thr	Met		Asn	Thr
			820					825					830		
Ser	Glu		Val	Ser	Ser	Glu		Tyr	Leu	Leu	Ser	Ala	Leu	Ala	Ala
,	<i>C</i> 1	835	17 3	37 3	61	TO I	840	D		DI	7.1	845	D	æ	
Leu		Lys	Val	val	Glu		Leu	Pro	HIS	Phe		Ser	Pro	lyr	Leu
C1	850	11.	Lau	Can	C1 m	855 Val	11.	нз	Lan	C1	860	11-	Т1	C	C 1
865	GLy	116	Leu	261	870	vai	116	ms	rea	875	Lys	He	1111	ser	880
	G1v	Sor	Ala	Sor		Δla	Asn	116	Ara		Thr	Ser	lau	lve	
mc t	01)	501	nia	885	OIII	ma	AGII	310	890	Leu	1111	561	Lea	895	Lys
Thr	Leu	Ala	Thr		Leu	Ala	Pro	Arg		Leu	Leu	Pro	Ala		Lvs
		,,,,	900					905		200		•••	910		
Lvs	Thr	Tyr	Lys	Gln	lle	Glu	Lvs		Trp	Lvs	Asn	His		G1 v	Pro
•		915	•				920		•	,		925		•	
Phe	Met	Gly	He	Leu	Gln	Glu	His	lle	Gly	Va]	Met	Lys	Lys	Glu	Glu
	930					935					940				
Leu	Thr	Ser	His	Gln	Ser	Gln	Leu	Thr	Ala	Phe	Phe	Leu	Glu	Ala	Leu
945					950					955					960
Asn	Phe	Aro	Ala	Gln	Hic	Ser	Glu	Aen	Aen	Leu	Glu	Glu	Val	G1 v	Lve

Thr Glu Asn Cys Ile Ile Asp Cys Leu Val Ala Met Val Val Lys Leu 980 985 990 Ser Glu Val Thr Phe Arg Pro Leu Phe Phe Lys Leu Phe Asp Trp Al 995 1000 1005 Lys Thr Glu Asp Ala Pro Lys Asp Arg Leu Leu Thr Phe Tyr Asn Leu 1010 1015 1020
Ser Glu Val Thr Phe Arg Pro Leu Phe Phe Lys Leu Phe Asp Trp Algorithms 1995 1000 1005 Lys Thr Glu Asp Ala Pro Lys Asp Arg Leu Leu Thr Phe Tyr Asn Leu
995 1000 1005 Lys Thr Glu Asp Ala Pro Lys Asp Arg Leu Leu Thr Phe Tyr Asn Lo
Lys Thr Glu Asp Ala Pro Lys Asp Arg Leu Leu Thr Phe Tyr Asn Lo
1010 1015 1020
1010
Ala Asp Cys IIe Ala Glu Lys Leu Lys Gly Leu Phe Thr Leu Phe A
1025 1030 1035 104
Gly His Leu Val Lys Pro Phe Ala Asp Thr Leu Asn Gln Val Asn II
1045 · 1050 1055
Ser Lys Thr Asp Glu Ala Phe Phe Asp Ser Glu Asn Asp Pro Glu Ly
1060 1065 1070
Cys Cys Leu Leu Gln Phe lle Leu Asn Cys Leu Tyr Lys Ile Ph
1075 1080 1085
Leu Phe Asp Thr Gln His Phe Ile Ser Lys Glu Arg Ala Glu Ala Le
1090 1095 1100
Met Met Pro Leu Val Asp Gln Leu Glu Asn Arg Leu Gly Gly Glu Gl
1105 1110 1115 112
Lys Phe Gln Glu Arg Val Thr Lys His Leu Ile Pro Cys Ile Ala Gl
1125 1130 1135
Phe Ser Val Ala Met Ala Asp Asp Ser Leu Trp Lys Pro Leu Asn Ty
1140 1145 1150
Gln 11e Leu Leu Lys Thr Arg Asp Ser Ser Pro Lys Val Arg Phe Al
1155 1160 1165
Ala Leu Ile Thr Val Leu Ala Leu Ala Glu Lys Leu Lys Glu Asn Ty
1170 1175 1180
Ile Val Leu Leu Pro Glu Ser Ile Pro Phe Leu Ala Glu Leu Met Gl
1185 1190 1195 120
Asp Glu Cys Glu Glu Val Glu His Gln Cys Gln Lys Thr Ile Gln Gl
1205 1210 1215
Leu Glu Thr Val Leu Gly Glu Pro Leu Gln Ser Tyr Phe

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<211> 104
<212> PRT
<213> Homo sapiens
<400> 3562
Met Ser Arg Arg Glu Glu Thr His Cys Trp Lys Lys Gln Pro Met
                                     10
Thr Ala Pro Leu Pro Gly Thr Arg Pro His Pro Leu Pro Ala Pro Leu
             20
                                 25
                                                     30
Pro Gly Val Gln Pro Lys Arg Thr Tyr Val Leu Thr Pro Leu Lys Pro
                             40
                                                 45
Leu Val Leu Ser Pro Gln Glu Thr Trp Leu Cys Val Cys Glu Trp Leu
                         55
Thr Phe Leu His Pro Leu Val Leu Pro Phe Pro Ser Arg Gly Thr Glu
                     70
                                         75
Arg Gln Gly Arg Ile His Val Pro Ile Val Glu Ala Glu Lys Arg Glu
                 85
                                     90
                                                         95
Ser Val Leu Tyr Thr Val Leu Ile
            100
<210> 3563
<211> 324
<212> PRT
<213> Homo sapiens
<400> 3563
Met Leu Arg Ala Phe Leu Phe Leu Ser Leu Phe Pro His Ser Gln Val
  1
                  5
                                     10
Leu Val Tyr Glu Leu Leu Gly Lys Gly Phe Arg Gly Gly Gly Gly
                                 25
Arg Trp Lys Ala Leu Leu Gly Arg His Gln Ala Arg Leu Lys Ala Glu
                             40
                                                 45
Leu Ala Arg Leu Lys Val His Arg Gly Val Ser Arg Asn Glu Asp Leu
     50
                                             60
                         55
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Leu Glu Val Gly Ser Arg Pro Gly Pro Ala Ser Gln Leu Pro Arg Phe

65					70					75					80
Val	Arg	Val	Asn	Thr	Leu	Lys	Thr	Cys	Ser	Asp	Asp	Val	Val	Asp	Tyr
				85					90					95	
Phe	Lys	Arg	Gln	Gly	Phe	Ser	Tyr	Gln	Gly	Arg	Ala	Ser	Ser	Leu	Asp
			100					105					110		
Asp	Leu	Arg	Ala	Leu	Lys	Gly	Lys	His	Phe	Leu	Leu	Asp	Pro	Leu	Met
		115					120					125			
Pro	Glu	Leu	Leu	Val	Phe	Pro	Ala	Gln	Thr	Asp	Leu	His	Glu	His	Pro
	130					135					140				
Leu	Tyr	Arg	Ala	Gly	His	Leu	He	Leu	Gln	Asp	Arg	Ala	Ser	Cys	Leu
145					150					155					160
Pro	Ala	Met	Leu	Leu	Asp	Pro	Pro	Pro	Gly	Ser	His	Val	lle	Asp	Ala
				165					170					175	
Cys	Ala	Ala	Pro	Gly	Asn	Lys	Thr	Ser	His	Leu	Ala	Ala	Leu	Leu	Lys
			180					185					190		
Asn	Gln	Gly	Ser	Leu	Pro	Leu	Thr	Trp	Met	Pro	Ser	Gly	Trp	His	Pro
		195					200					205			
Trp	Pro	Arg	Cys	Trp	Pro	Gly	Leu	Ala	Ser	Leu	Ala	Val	Asn	Trp	Leu
	210					215					220				
Arg	Arg	Thr	Ser	Trp	Arg	Ser	Pro	Pro	Arg	Ile	His	Ala	Thr	Met	Arg
225					230					235					240
Ser	Thr	Thr	Ser	Cys	Trp	He	Leu	Pro	Ala	Val	Ala	Arg	Val	Cys	Arg
				245					250					255	
Ala	Asp	Ser	Trp	Arg	Ser	Pro	G1 y	G1n	Ala	His	Leu	Ala	Arg	Cys	Val
			260					265					270		
Cys	Met	Pro	Trp	Gln	G1y	Ser	Ser	Ser	Glu	Pro	Cys	Ala	Thr	Arg	Ser
		275					280					285			
Leu	Ser	Leu	Pro	Cys	Ser	Gly	Ser	Ser	Thr	Pro	Arg	Ala	Pro	Ser	Ala
	290					295					300				
Arg	Arg	Arg	Met	Lys	Thr	Trp	Cys	Glu	Met	Arg	Cys	Ser	Arg	Thr	Arg
305					310					315					320
Ala	Pro	Ser	Gly												

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<213> Homo sapiens
<400> 3564
Met Val Ser Val Arg Gly Gln Cys Pro Arg Gly Gly Phe Trp Leu Glu
Pro Ser Val Ala Glu Ala Gly Asp Leu Leu Ala Val Asn Ser Gly Val
             20
                                  25
                                                      30
Cys Arg Pro Gly Gly His Arg Gly Arg Ser Ser Ala Leu Gly Pro Leu
                              40
Cys Gly Ser Trp Thr Arg Ser Arg Glu Pro Gln Arg Pro Val Pro Ser
                         55
                                              60
Pro Arg Gly Asp Leu Gly Pro Arg Pro Trp Ser Pro Leu Trp Ala Ala
                     70
                                          75
 65
                                                              80
Leu Arg Pro Gln Pro Arg Val Ser Pro Asp Cys Ser Val Thr Ala Gly
                                      90
Gly Ser Trp Gly Asp Pro Ile Ser Val Cys Gly Val Cys Ala Phe Lys
            100
                                                     110
Lys Pro Leu Gly Trp Lys Pro Tyr Asp Glu Ser Thr Gly Ala Phe Pro
        115
                             120
                                                 125
His Leu
    130
<210> 3565
<211> 121
<212> PRT
<213> Homo sapiens
<400> 3565
Met Ser Leu Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg Arg Gln
                                      10
Pro Arg Tyr Pro Arg Lys Ser Thr Pro Thr Arg Asn Lys Leu Gly His
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25

Tyr Ala Ile Ile Lys Phe Pro Leu Ala Thr Glu Ser Ala Val Lys Lys

30

35 40 45 lle Glu Glu Asn Asn Thr Leu Val Phe Thr Val Asp Val Lys Asp Asn 50 55 60 Lys His Gln 11e Arg Gln Ala Val Lys Lys Val Tyr Asp Ser Asp Val 65 70 75 Ala Lys Val Thr Thr Leu Ile Cys Pro Asp Lys Glu Lys Lys Ala Tyr 90 Val Arg Leu Ala Pro Asp Tyr Asp Ala Phe Asp Val Val Thr Lys Leu 100 105 110 Gly Ser Pro Lys Leu Ser Pro Ala Gly 115 120

<210> 3566

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3566

Met Gly Trp Gly Ser Arg Leu His His Met Ala Gly Ala Gln Ala Arg

1 5 10 15

Arg Gly Ser Gly Trp Gly Ser Met Trp Gly Ala Trp Leu Trp Asp Pro 20 25 30

Gly Gly Pro Gly Pro Cys Arg Pro Ala Val Gln Val Ser Ser Ala Asp 35 40 45

Ala Arg Leu Met Val Phe Asp Lys Thr Glu Gly Thr Trp Arg Leu Leu 50 60

Cys Ser Ser Arg Ser Asn Ala Arg Val Ala Gly Leu Ser Cys Glu Glu 65 70 75 80

Met Gly Phe Leu Arg Tyr Trp Gly Pro Ser Glu Gly Trp Glu Pro Gly

85 90 95

Gly Ala Gly Glu Gln Ala

<211> 203 <212> PRT <213> Homo sapiens

<400> 3567

Met Trp Ser Ala Ala Ser Thr Pro Pro Gly Thr Ala Ala Ser Ser Pro 1 5 10 15

Thr Thr Gln His Pro Gly Lys Trp Ser Arg Ser Trp Trp Pro Leu Gly
20 25 30

Ser Arg Pro Leu Ala Ser Val Pro Ser Thr Thr Trp Ala Pro Thr Pro
35 40 45

Ser Ala Ser Pro Ser Ser Ser Cys Ser Gly Ser Gln Gly Ser Arg Gly
50 55 60

His Gly Arg Gly His Leu Glu Gly Glu Val Leu Pro Ser Met Gly Val 65 70 75 80

Val Ser Leu Cys Thr Pro Asn Gln Glu Pro Asp Ala Glu Ser Gln Gly

85 90 95

Lys Gln Gly Pro Leu Lys Ser Arg Asn Leu Leu Gly Pro Pro Ser Gly
100 105 110

Leu Pro Trp Gly Leu Gln Asp His Trp Gly Ser Thr Val Ser Gly Trp 115 120 125

Leu Gln Leu Leu Ser Tyr Trp Tyr Cys Cys Ala Arg Gly Glu Gly Met 130 135 140

Arg Gly Ser Ala Arg Lys Glu Arg Arg Val Ser Ser Ser Asp Thr Ala 145 150 155 160

Val Cys Ser Glu Lys Thr Pro Val Pro Arg Ile Val Glu Ile Glu Val 165 170 175

Gly Arg Glu Glu Val Arg Glu Arg Leu Trp Pro Gln Gly Gln Leu 180 185 190

Thr Thr Asn Pro Leu Pro Thr Gln Ala Leu Ser 195 200

<210> 3568

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3568

Met Asn Leu Lys Arg Tyr Phe Glu Gln Lys His Arg Thr Glu Ala Ser

1 5 10 15

Val Pro Ala Pro Gln Ala Ala Cys Val Pro Gly Tyr Pro Val Pro Ser 20 25 30

Asp Pro Gly Glu Ala Gly Leu Ser Cys Thr Gly Ser Ser Gly Thr Gly
35 40 45

Tyr Cys Ala Ser Gln Phe Ser Val Ile Ser His Leu Arg Thr Ile Phe 50 55 60

Leu Pro Glu Leu Arg Pro Leu Pro Arg Leu Ser Leu Glu Asp Thr Asn
65 70 75 80

Asn Glu Asp Thr Asn Asn Glu His Leu Leu Gly Ser Pro Glu Asp Pro

85 90 95

His Met Glu Ala Ala Gln Pro Ser Pro Tyr Pro Glu Ala His Arg Leu 100 105 110

His Lys Pro Arg Pro Gly Pro Ser Leu Met Ala His Arg Gln Val Leu 115 120 125

Arg Thr Pro Thr Ala Leu Leu 130 135

<210> 3569

<211> 534

<212> PRT

<213> Homo sapiens

<400> 3569

Met Ser Leu Leu Arg Asp Ser Arg Asn Tyr Ser Gln Glu Thr Val Pro

1 5 10 15

Lys Ala Asn Phe Gly Phe Ser Gly IIe Ser Pro Leu Glu Asp Glu IIe
20 25 30

Asn Lys Gly Ser Lys lle Ser Gly Leu Gln Tyr Ser lle Pro Asp Thr 35 40 45

Glu Asn Gln Thr Leu Asn Tyr Gly Lys Thr Lys Glu Met Glu Lys Gln

	50					55					60				
Asn	Thr	Asp	Lys	Cys	His	Val	Ser	Ser	His	Thr	Arg	Leu	Thr	Glu	Ser
65					70					75					80
Ser	Val	His	Asp	Phe	Lys	Thr	Glu	Asp	Gln	Glu	Val	lle	Thr	Thr	Asp
				85					90					95	
Phe	Gly	Gln	Val	Val	Leu	Arg	Pro	Lys	Glu	Ala	Arg	His	Ala	Asn	Val
			100					105					110		
Asn	Pro	Asn	Glu	Asp	Gly	Glu	Ser	Ser	Ser	Ser	Ser	Pro	Thr	Glu	Glu
		115					120					125			
Asn	Ala	Ala	Thr	Asp	Asn	Ile	Ala	Phe	Met	Ile	Thr	Glu	Thr	Thr	Val
	130					135					140				
Gln	Val	Leu	Ser	Ser	Gly	Glu	Val	His	Asp	Ile	Val	Ser	Gln	Lys	Gly
145					150					155		•			160
Glu	Asp	He	Gln	Thr	Val	Asn	Пе	Asp	Ala	Arg	Lys	Glu	Met	Thr	Pro
				165					170					175	
Arg	Gln	Glu	Gly	Thr	Asp	Asn	Glu	Asp	Pro	Val	Val	Cys	Leu	Asp	Lys
			180					185					190		
Lys	Pro	Val	lle	lle	He	Phe	Asp	Glu	Pro	Met	Asp		Arg	Ser	Ala
		195					200					205			
Tyr		Arg	Leu	Ser	Thr		Phe	G1u	Glu	Cys		Glu	Glu	Leu	Glu
	210					215					220				
	Met	Met	Met	Glu		Lys	He	Glu	Glu		Glu	Glu	Glu	Glu	
225					230					235					240
Gly	Asp	Ser	Val		GIn	Asn	Asn	Asn		Ser	GIn	Met	Ser	His	Lys
	V 3	4.1	n :	245		,		T)	250	61	61	V 1	C 1	255 TI	
Lys	vai	Ala		Gly	Asn	Leu	Arg		61 y	Gin	GIn	vai		Thr	Lys
Can	Cln	Date	260 u.e.	Con	Lou	110	Tha	265	Tha	A 20.00	Aan	Due	270	C1	C1.
261.	GIH	275	nis	ser	Leu	АТА	280	GJU	Inr	Arg	ASI	285	бту	Gly	GIN
Glu	Mor		Ana	Thr	Glu	Lou		Lve	Pho	Sor	Hic		Acn	Ser	Pro
o j u	290	иэн	мg	1 111	Olu	295	лы	Lys	THE	361	300	vai	veh	261	110
Asn		Glu	Cvs	Lvs	Glv		Asn	Ala	Thr	Asn		Gln	Phe	Glu	Ser
305	ocı	GIG	Cjo	LyS	310	Olu	пор	1110	1111	315	пор	OTH	THE	Gru	320
	Lvs	Lvs	Lvs	Phe		Phe	Lvs	Phe	Pro		Lvs	Gln	Leu	Ala	
	22.9		٥٠٥	325	ت ر		ي رب		330	ب رد	200	0111	,, , , , , , , , , , , , , , , , , , ,	335	.,, (
Len	Thr	Gln	Ala		Arø	Thr	Glv	Thr		Thr	Glv	Lvs	lvs	Thr	Leu

			340					345					350		
Gln	Val	Val	Val	Tyr	Glu	Glu	Glu	Glu	Glu	Asp	Gly	Thr	Leu	Lys	Gln
		355					360					365			
His	Lys	Glu	Λla	Lys	Arg	Phe	Glu	11e	Ala	Arg	Ser	Gln	Pro	Glu	Asp
	370					375					380				
Thr	Pro	Glu	Asn	Thr	Val	Arg	Arg	Gln	Glu	Gln	$\dot{\text{Pro}}$	Ser	He	Glu	Ser
385					390					395					400
Thr	Ser	Pro	He	Ser	Arg	Thr	Asp	Glu	lle	Arg	Lys	Asn	Thr	Tyr	Arg
				405					410					415	
Thr	Leu	Asp	Ser	Leu	Glu	Gln	Thr	Ile	Lys	Gln	Leu	Glu	Asn	Thr	He
			420					425					430		
Ser	Glu	Met	Ser	Pro	Lys	Ala	Leu	Val	Asp	Thr	Ser	Cys	Ser	Ser	Asn
		435					440					445			
Arg	Asp	Ser	Val	Ala	Ser	Ser	Ser	His	11e	Ala	Gln	Glu	Ala	Ser	Pro
	450					455					460				
Arg	Pro	Leu	Leu	Val	Pro	Asp	Glu	Gly	Pro	Thr	Ala	Leu	Glu	Pro	Pro
465					470					475					480
Thr	Ser	He	Pro	Ser	Ala	Ser	Arg	Lys	Gly	Ser	Ser	Gly	Ala	Pro	Gln
				485					490					495	
Thr	Ser	Arg	Met	Pro	Val	Pro	Met	Ser	Ala	Lys	Asn	Arg	Pro	Gly	Thr
			500					505					510		
Leu	Asp	Lys	Pro	Gly	Lys	Gln	Ser	Lys	Leu	Gln	Asp	Pro	Arg	Gln	Tyr
		515					520					525			
Arg	Gln	Val	Val	Leu	Pro										
	530														

<210> 3570

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3570

Met Ala Pro Glu Asp Pro Ala Ser Leu Arg His Gly Leu Trp His Gln

1 5 10 15

Arg Thr Gln Pro Leu Ala Pro Trp Thr Met Ala Ala Glu Asp Pro Ala

			20					25					30		
Pro	Arg	He	Leu	Asp	Tyr	Gly	Ser	Arg	Gly	Pro	Ser	Leu	Pro	Ala	Ser
		35					40					45			
Trp	Thr	Lys	Ala	Pro	Glu	Asp	Pro	Ala	Pro	Ser	Gly	Pro	Gly	Leu	Trp
	50					55					60				
Gln	Gln	Arg	Thr	Gln	Pro	Leu	Ala	Ser	Trp	Thr	Met	Ala	Pro	Glu	Asp
65					70					75					80
Pro	Ala	Ser	Leu	Arg	His	Gly	Leu	Trp	His	Gln	Arg	Thr	Gln	Pro	Leu
				85					90					95	
Ala	Pro	Trp	Thr	Met	Ala	Ala	Glu	Asp	Pro	Ala	Pro	Trp	Arg	Pro	G1 y
			100					105					110		
Leu	Arg	His	Ser	Arg	Thr	Pro	Gln	His	Arg	Val	Leu	Leu	His	Arg	Arg
		115					120					125			
Thr	Leu	Ala	Gly	Leu	Arg	Pro	$\operatorname{Gl} y$	Leu	Ser	Tyr					
	130					135							,		
<210)> 39	571													
<211	1> 34	15													
<212	2> PI	?T					•								
<213	3> He	omo :	sapi	ens											
<400)> 3	571													
Met	Asp	Gly	Glu	Gln	Leu	Glu	Gly	Ala	Ser	Ser	G] u	Lys	Arg	Glu	Arg
1				5					10					15	
Glu	Ala	Ala	Glu	Glu	Gly	Leu	Ala	Ser	Val	Lys	Arg	Pro	Arg	Arg	Glu
			20					25					30	•	
Ala	Leu	Ser	Asn	Asp	Thr	Thr	Glu	Ser	Leu	Ala	Ala	Asn	Ser	Arg	G1 y
		35					40					45			
Arg	Glu	Lys	Pro	Arg	Pro	Leu	His	Ala	Leu	Ala	Ala	Gly	Phe	Ser	Pro
	50					55					60				
Pro	Va]	Asn	Val	Thr	Va]	Ser	Pro	Arg	Ser	Glu	Glu	Ser	His	Thr	Thr
65					70					75					80
Thr	Val	Ser	Gly	Gly	Asn	Gly	Ser	Val	Phe	Gln	Ala	Gly	Pro	G1n	Leu

Gln Ala Leu Ala Asn Leu Glu Ala Arg Arg Gly Ser Ile Gly Ala Ala

			100					105					110		
Leu	Ser	Ser	Arg	Asp	Val	Ser	Gly	Leu	Pro	Va]	Tyr	Ala	Gln	Ser	Gly
		115					120					125			
Glu	Pro	Arg	Arg	Leu	Thr	Gln	Ala	Gln	Val	Ala	Ala	Phe	Pro	Gly	Glu
	130					135					140				
Asn	Ala	Leu	Glu	His	Ser	Ser	Asp	Gln	Asp	Thr	Trp	Asp	Ser	Leu	Arg
145					150					155					160
Ser	Pro	Gly	Phe	Cys	Ser	Pro	Leu	Ser	Ser	Gly	G1 y	Gly	Ala	Glu	Ser
				165					170					175	
Leu	Pro	Pro	Gly	Gly	Pro	Gly	His	Ala	Glu	Ala	Gly	His	Leu	Gly	Lys
			180					185					190		
Val	Cys	Asp	Phe	His	Leu	Asn	His	Gln	Gln	Pro	Ser	Pro	Thr	Ser	Val
		195					200					205			
Leu	Pro	Thr	Glu	Val	Ala	Ala	Pro	Pro	Leu	Glu	Lys	Пе	Leu	Ser	Val
	210					215					220				
Asp	Ser	Val	Ala	Val	Asp	Cys	Ala	Tyr	Arg	Thr	Val	Pro	Lys	Pro	Gly
225					230					235					240
Pro	Gln	Pro	Gly	Pro	His	Gly	Ser	Leu	Leu	Thr	Glu	Gly	Cys	Leu	Arg
				245					250					255	
Ser	Leu	Ser	Gly	Asp	Leu	Asn	Arg	Phe	Pro	Cys	Gly	Met	Glu	Val	His
			260					265					270		
Ser	Gly	Gln	Arg	Glu	Leu	Glu	Ser	Val	Val	Ala	Val	Gly	Glu	Ala	Met
		275					280					285			
Ala	Phe	Glu	He	Ser	Asn	Gly	Ser	His	G] u	Leu	Leu	Ser	Gln	Gly	Gln
	290					295					300				
Lys	Gln	He	Phe	He	Gln	Thr	Ser	Asp	G1 y	Leu	Пe	Leu	Ser	Pro	Pro
305					310					315					320
Gly	Thr	He	Val	Ser	Gln	Glu	Glu	Asp	Пе	Val	Thr	Val	Thr	Asp	Ala
				325					330					335	
G1u	Gly	Arg	Ala	Cys	Gly	Trp	Ala	Arg							
			340					345							

<210> 3572

⟨211⟩ 484

<212> PRT

<213> Homo sapiens

<400)> 35	572													
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lle	Glu	Glu	Phe	Ser	lle	lle	Pro	Glu	Ala	Pro	Met	Arg	Ser	Ser	Gln
			20					25					30		
Val	Ser	Ala	Leu	Gly	Leu	Glu	Ala	Gln	Glu	Asp	Glu	Asp	Pro	Ser	Tyr
		35					40					45			
Lys	Trp	Arg	Glu	Glu	His	Arg	Leu	Ser	Ala	Thr	Gln	Gln	Ser	Glu	Leu
	50					55					60				
Arg	Asp	Val	Cys	Asp	Tyr	Ala	lle	Glu	Thr	Met	Pro	Ser	Phe	Pro	Lys
65					70					75					80
Glu	Gly	Ser	Ala	Asp	Val	Glu	Pro	Asn	Gln	Glu	Ser	Leu	Val	Ala	Glu
				85					90					95	
Ala	Cys	Asp	Thr	Pro	Glu	His	Trp	G]u	Ala	Val	Pro	Gln	Ser	Leu	Ala
			100					105					110		
Gly	Arg	Gln	Ala	Arg	Thr	Leu	Ala	Pro	Pro	Glu	Leu	Trp	Ala	Cys	Pro
•		115					120					125			
Ile	Gln	Ser	Glu	His	Leu	Asp	Met	Ala	Pro	Phe	Ser	Ser	Asp	Leu	Gly
	130					135					140				
Ser	Glu	Glu	Glu	Glu	Val	Glu	Phe	Trp	Pro	Gly	Leu	Thr	Ser	Leu	Thr
145					150					155					160
Leu	Gly	Ser	Gly	Gln	Ala	Glu	Glu	Glu	Glu	Glu	Thr	Ser	Ser	Asp	Asn
				165					170					175	
Ser	Gly	Gln	Thr	Arg	Tyr	Tyr	Ser	Pro	Cys	Glu	Glu	llis	Pro	Ala	Glu
			180					185					190		
Thr	Asn	Gln	Asn	Glu	Gly	Ala	Glu	Ser	Gly	Thr	He	Arg	Gln	Gly	Glu
		195										205			
Glu		Pro	Ser	Glu	Glu		Gln	G] u	Ser	Gln	Gly	Leu	Leu	His	Pro
	210					215					220				
	Glu	Val	Gln	Va]		Glu	Glu	Gln	Gly		Gln	Glu	Ala	61 y	
225					230					235					240
Arg	Gly	Glu	Gly		Leu	Arg	Glu	Asp		Cys	Ala	Asp	Gly		Leu
				245					250					255	
Gly	Glu	Glu	Gln	Met	He	G] u	Gln	Val	Asn	Asp	Glu	Lys	Gly	Glu	Gln

			260					265					270		
Lys	Gln	Lys	Gln	Glu	Gln	Val	Gln	Asp	Val	Met	Leu	Gly	Arg	Gln	Gly
		275					280					285			
Glu	Arg	Met	Gly	Leu	Thr	Gly	Glu	Pro	Glu	Gly	Leu	Asn	Asp	Gly	Glu
	290					295					300				
Trp	Glu	Gln	Glu	Asp	Met	Glu	Arg	Lys	Ala	Gln	Gly	Gln	Gly	Gly	Pro
305					310					315					320
Glu	Gln	Gly	Glu	Glu	Arg	Lys	Arg	Glu	Leu	Gln	Va]	Pro	Glu	Glu	Asn
				325					330					335	
Arg	Ala	Asp	Ser	Gln	Asp	Glu	Lys	Ser	Gln	Thr	Phe	Leu	Gly	Lys	Ser
			340					345					350		
Glu	Glu	Val	Thr	Gly	Lys	Gln	Glu	Asp	His	Gly	He	Lys	Glu	Lys	$\operatorname{Gl} y$
		355					360					365			
Val	Pro	Val	Ser	Gly	Gln	Glu	Ala	Lys	Glu	Pro	Glu	Ser	Trp	Asp	Gly
	370					375					380				
Gly	Arg	Leu	Gly	Ala	Val	Gly	Arg	Ala	Arg	Ser	Arg	Glu	Glu	Glu	Asn
385					390					395					400
Glu	His	His	Gly	Pro	Ser	Met	Pro	Ala	Leu	He	Ala	Pro	Glu	Asp	Ser
				405					410					415	
Pro	His	Cys	Asp	Leu	Phe	Pro	Gly	Ala	Ser	Tyr	Leu	Val	Thr	Gln	He
			420					425					430		
Pro	Gly	Thr	Gln	Thr	Glu	Ser	Arg	Ala	Glu	Glu	Leu	Ser	Pro	Ala	Ala
		435					440					445			
Leu	Ser	Pro	Leu	Leu	Glu	Pro	He	Arg	Cys	Ser	His	Gln	Pro	He	Ser
	450					455					460				
Leu	Leu	Gly	Ser	Phe	Leu	Thr	Glu	Glu	Ser	Pro	Asp	Lys	Glu	Lys	Leu
465					470					475					480
Leu	Ser	Val	Leu												

<210> 3573

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3573 Met Pro Ser Ser Pro Thr Trp Ala Leu Ile Leu His Ile Arg Leu Pro 10 Thr Leu Thr Pro Pro Ile Gly Pro Pro Gln Pro Cys Thr Tyr Ser Pro 25 30 His Gly Cys Gln Pro His Pro Ala His Ala Glu Ser Pro Cys Cys Gly 40 Val Pro Pro His Gly Gln Leu His Thr Leu Leu Gly Leu Thr Pro Ala 50 55 60 Leu Pro Thr Ser Thr Pro Ser Leu Pro Cys Thr Gly Pro Pro Pro Arg 65 70 75 Val Asp Val Leu Cys Gly Arg Gln Ser Gly Ala Pro Lys Asp Gly His 90 Thr Leu Ser Pro Gly Thr Cys Glu Cys Tyr Met Ala Lys Gly Thr Leu 100 105 Gln Ile Lys Ile Lys Ile Val Asn Phe Lys Thr Gly Lys Leu Ser Trp 120 Ile Ile Cys Met Gly Pro Met Gln Ser Gln Gly Ser Ile Arg Ile Glu 135 140 130 Lys Ala Gly Arg Lys Lys Gly Arg Trp Glu Arg Gly Thr Gly Pro Ala 160 145 150 155 Ala Ala Gly Gly Lys 165 <210> 3574

<211> 275

<212> PRT

<213> Homo sapiens

20

<400> 3574

Met Ser Thr Ile Gly Ser Phe Glu Gly Phe Gln Ala Val Ser Leu Lys 10 Gln Glu Gly Asp Asp Gln Pro Ser Glu Thr Asp His Leu Ser Met Glu

25 Glu Glu Asp Pro Met Pro Arg Gln Ile Ser Arg Gln Ser Ser Val Thr

Glu Ser Thr Leu Tyr Pro Asn Pro 15r Intraction Pro 11e Ser Arg Arg Fro Gly Ala Ile Glu Thr Ala Met Glu Asp Asp Ala Ala Ile Glu Ala Met Glu Asp Asp Asp Ala			35	,				40					45			
Lys Tyr Phe Ala Thr Arg Pro Gly Ala Ile Glu Thr Ala Glu Asp Gly Glu Thr Ile Gly Phe Asp Asp Ile Ile Asp Ile Ile <td>Glu</td> <td>Ser</td> <td>Thr</td> <td>Leu</td> <td>Tyr</td> <td>Pro</td> <td>Asn</td> <td>Pro</td> <td>Tyr</td> <td>His</td> <td>Gln</td> <td>Pro</td> <td>Tyr</td> <td>Ile</td> <td>Ser</td> <td>Arg</td>	Glu	Ser	Thr	Leu	Tyr	Pro	Asn	Pro	Tyr	His	Gln	Pro	Tyr	Ile	Ser	Arg
Second S		50					55					60				
Leu Lys Gly His Rise Val Ala Glu Thr Ser Gly Glu Thr Ile Gly Phe 99 Phe 95 Phe 95 Phe Phe 96 Phe 96 Phe 100 Phe Phe 110 Phe <	Lys	Tyr	Phe	Ala	Thr	Arg	Pro	Gly	Ala	He	Glu	Thr	Ala	Met	Glu	Asp
Try Leu Leu Thr Lry Thr Lry Thr Asp	65					70					75					80
Trp Leu Leu Thr Lys Ile Asp His Trp Asp Glu Lys Glu Arg Ile Leu Leu Val Thr Asp Lys Thr Leu Leu Ile Cys Lys Tyr Asp Phe Ile Met Leu Ser Cys Val Glu Leu Glu He Phe Ile Phe Leu Ser Asp Phe Ile Arg Ile Cys Leu Glu Leu He Phe Phe Phe Pro Leu Ser Asp Phe Phe Pro Ile Pro Leu Ser Asp Phe Phe Pro Ile Ser Leu Asp Ile Ile Pro Ile	Leu	Lys	Gly	His	Val	Ala	Glu	Thr	Ser	G1 y	Glu	Thr	Ile	Gln	Gly	Phe
Leu Leu Leu Yal Thr Asp Lys Thr Leu Leu Ilo Leu Cys Lys Thr Asp Pho					85					90					95	
Leu Val Thr Asp Lys Thr Leu Leu Ile Cys Lys Tyr Asp Phe Ile Met Leu Ser Cys Val Gln Leu Gln Leu Ile Pro Leu Ser Ala Val Tyr Arg 11e Cys Cys Val Leu Bro Phe Thr Pro Ile Fro Ala Val Val Tyr Arg 11e Cys Leu Gly Lys Phe Thr Pro Pro Gly Met Ser Leu Asp Lys Ile Tyr Trp Gly Err Gly Lys Lys Ile Ile Tyr Tyr Trp Gly Err Fro Gly Ile I	Trp	Leu	Leu	Thr	Lys	Ile	Asp	His	Trp	Asn	Asn	Glu	Lys	Glu	Arg	He
115 120 125 125 125 125 125 125 125 125 125 125 125 120 <th< td=""><td></td><td></td><td></td><td>100</td><td></td><td></td><td></td><td></td><td>105</td><td></td><td></td><td></td><td></td><td>110</td><td></td><td></td></th<>				100					105					110		
Met Leu Ser Cys Val Gln Leu Gln Arg 11e Pro Leu Ser Ala Val Tyr Arg 11e Cys Leu Gly Lys Phe Thr Phe Pro Gly Met Ser Leu Asp Lys 14b Lys Lys Phe Thr Phe Pro Gly Met Ser Leu Asp Lys 14b Lys Gly Lys Phe Thr Phe Pro Gly Met Lys Lys Pro Gly Pro Into Into <t< td=""><td>Leu</td><td>Leu</td><td>Val</td><td>Thr</td><td>Asp</td><td>Lys</td><td>Thr</td><td>Leu</td><td>Leu</td><td>He</td><td>Cys</td><td>Lys</td><td>Tyr</td><td>Asp</td><td>Phe</td><td>He</td></t<>	Leu	Leu	Val	Thr	Asp	Lys	Thr	Leu	Leu	He	Cys	Lys	Tyr	Asp	Phe	He
130			115					120					125			
Arg 11e Cys Leu G1y Lys Phe Thr Phe Pro G1y Met Ser Leu Asp Lys 145	Met	Leu	Ser	Cys	Val	G1n	Leu	Gln	Arg	He	Pro	Leu	Ser	Ala	Val	Tyr
145		130					135					140				
Arg Gln Gly Gly Gly Gly Leu Arg Ile Tyr Trp Gly Ser Pro Gly Gly Gly Gln Gln Gly	Arg	He	Cys	Leu	G1 y	Lys	Phe	Thr	Phe	Pro	Gly	Met	Ser	Leu	Asp	Lys
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	145					150					155					160
Ser Leu Leu Ser Arg Trp Asn Pro Trp Ser Thr Glu Pro Tyr Ala 186 180 180 180 185 185 180 190 1	Arg	Gln	Gly	Glu	G1y	Leu	Arg	He	Tyr	Trp	Gly	Ser	Pro	Glu	Glu	Gln
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$																
Thr Phe Hr Phe H	Ser	Leu	Leu	Ser	Arg	Trp	Asn	Pro	Trp	Ser	Thr	Glu	Val	Pro	Tyr	Ala
195 196 197 198																
Ile Cys Lys Leu Ser Gly Phe Met Ser Lys Leu Pro Ala Ile Gly Arg Leu Pro Ala Ile Met Asn Ala His Lys Asn Ser Thr Gly Ser Gly Lys Lys Lys Leu Met 225 Leu Thr Gly Gly Thr Gly Lys Lys Leu Met Val Leu Thr Gly Thr Tyr Thr Gly Leu Met Ser Val Leu Thr Leu Ile Leu Ile Thr Tyr Thr Gly Leu Met Ser Val Leu Thr Leu Ile Leu Ile Leu Thr Tyr Thr Gly Leu Met Ser Val Leu Leu Ile Leu Ile Leu Thr Tyr Thr Gly Leu Met S	Thr	Phe		Glu	His	Pro	Met		Tyr	Thr	Ser	Glu		Phe	Leu	Glu
Second																
Asn Ala His Lys Asn Ser Thr Gly Ser Gly Arg Gly Lys Lys Leu Met 225	He		Lys	Leu	Ser	Gly		Met	Ser	Lys	Leu		Pro	Ala	He	Gln
225																
Val Leu Thr Glu Pro Ile Leu lle Glu Thr Tyr Thr Gly Leu Met Ser 245 250 255		Ala	His	Lys	Asn		Thr	Gly	Ser	Gly		Gly	Lys	Lys	Leu	
245 250 255				0.1	Б.				0.3	mı.			0.1			
	Val	Leu	lhr	Glu		He	Leu	He	Glu		Tyr	Thr	Gly	Leu		Ser
	DI		C 1						0.1		6					0
Phe Ile Gly Asn Arg Asn Lys Leu Gly Tyr Ser Leu Ala Arg Gly Ser	Phe	11e	61 y		Arg	Asn	Lys	Leu		Lyr	Ser	Leu	Ala		GIV	Ser
260 265 270	11.	C1.	DI	260					205					270		
Ile Gly Phe	116	оту														
275			210													

<210> 3575

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3575

Met Gln Pro Val Ile Ser Ala Leu Asn Ile Gln Thr Gln Thr Val Gln

1 5 10 15

Thr His Pro Ala Pro Arg Asn Thr Ser Glu His Cys Thr Leu Pro Ala 20 25 30

Cys Asp Ala Gln Glu Glu His Arg Asp Thr Val Asp Gly Ser 11e Ala 35 40 45

Arg Thr Glu Ser Ala Ser Gly Glu Ile Trp Arg Gln Thr His Met Asp 50 55 60

Gly Glu His His Val Asn Thr Lys Ala Glu Ile Ser Val Met Ser Ala 65 70 75 80

Asn Gln Gly Ala Pro Arg Ile Thr Ser Lys Pro Pro Glu Ala Arg Arg
85 90 95

Glu Ala Arg Asp Arg Ser Leu Pro Ser Ala Phe Ser Leu Arg Gly Leu 100 105 110

Thr Asp Thr Leu IIe Leu Gly Phe Cys Pro Pro Glu Leu
115 120 125

<210> 3576

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3576

Met Ser Leu Met Thr Arg Glu Asn Leu Ala Phe Arg Gly Ser Leu Met

Gly Cys Ser Glu Leu Lys Pro Phe Gln Glu Leu Thr His Gln Ser Ala 20 25 30

Val Ser His Ser Arg Ala Asp Val Ala Asp Val Trp Trp Tyr Cys Gly
35 40 45

Gly Pro Leu Leu Asp Thr Leu Pro Ser Asn Trp Ser Gly Thr Cys Thr 50 55 60

Leu Val Gln Phe Ala 11e Pro Phe Ala Leu Ala Phe Leu Gln Pro Glu

65					70					75					80
Lys	Glu	Lys	Pro	Gln	His	Arg	Lys	He	Arg	Glu	Ala	Pro	Tyr	Gly	Ser
				85					90					95	
Phe	Asp	Ser	Gln	Val	Tyr	Leu	Asp	Ala	Thr	Gly	Val	Pro	Gln	Gly	Val
			100					105					110		
Pro	His	Lys	Phe	Lys	Ala	Gln	Asp	Gln	He	Ala	Ala	Gly	Phe	Glu	Ser
		115					120					125			
lle	Phe	Trp	Trp	Va]	Thr	lle	Ser	Lys	Asn	Ile	Asp	Trp	He	Asn	Tyr
	130					135					140				
Ile	Tyr	Tyr	Asn	Gln	Gln	Arg	Phe	Ile	Asn	Tyr	Thr	Arg	Asp	Ala	Val
145					150					155					160
Lys	Gly	11e	Ala	Glu	Gln	Leu	Gly	Pro	Thr	Ser	Gln	Met	Ala	Trp	Glu
				165					170					175	
Asn	Arg	Met	Ala	Leu	Asp	Met	Πe	Leu	Ala	Lys	Lys	Gly	Gly	Val	Cys
			180					185					190		
Val	Met		Lys	Thr	Gln	Cys	Cys	Thr	Phe	He	Pro	Asn	Asn	Thr	Ala
		195					200					205			
Pro		Gly	Ser	Ile	Thr		Ala	Leu	Gln	Gly		Thr	Ala	Leu	Ser
	210					215					220				
	Glu	Leu	Ala	Lys		Ser	Gly	Val	Asn		Pro	Phe	Ser	Gly	
225			_	ъ.	230		_		a.1	235					240
Leu	Glu	Arg	Trp	Phe	Gly	Lys	Trp	Lys		He	He	Ala	Ser		Leu
ar I	c			245	N 1	7.1	6.1	17 1	250	7.1	,	DI	C.1	255	
Ihr	Ser	Leu		Ala	Val	11e	61 y		Val	11e	Leu	Phe		Cys	Cys
V - 1	Tl	D	260	11.	Δ	C1	1	265 V-1	C1	۸	1	T1 -	270	Tl	V - 1
vaı	ınr		Cys	He	Arg	GIY	280	vai	GIN	Arg	Leu		GIU	Inr	vai
Lou	The	275	Thr	Ser	Lou	Son		Dro	Dro	Dro	Tur	285	Aan	Luc	Lou
Leu	290	Lys	1111	261	Leu	295	261	110	110	110	300	261	nsp	Lys	Leu
Pho		Lou	Glu	Asp	Gln		Glu	Gln	Gln	Sor		Asn	Lou	ا ما	lve
305	Leu	Leu	GIU	nsp	310	101	Olu	0111	0111	315	UII	пэр	Leu	Leu	320
	Phe	Glu	Glu	G] u		Pro				010					020
8		014	014	325	V1)	.10									
				_											

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3577

Met Leu Val Leu Thr Ser Ala lle Pro Gln Ala Lys His Ser Phe Tyr

1 5 10 15

Gln Ala His Cys Leu Ala Gly Gly Arg Lys Phe His Arg Leu Ser Leu 20 25 30

Gly Ser Phe Cys Arg Asn Asn Pro Tyr Ser Ser Gly Gln Gly Ala Asn 35 40 45

Val Ser 11e Gln Leu Ala Ala Lys Asn Val Tyr Pro Asn Lys Gln Gly
50 55 60

Arg Pro Thr Asp Pro Leu Asp Pro Leu Glu Met Asp Leu Gly His Ser
65 70 75 80

Ala Phe His Asp Phe Ser Lys Gln Arg Gly Val Val Ile Leu Ser Lys 85 90 95

Ser Trp Arg Gln Cys Gln Cys Pro Ala Thr His His Val Pro Val Leu 100 105 110

Glu Lys Pro Leu Cys Thr Pro Leu Cys Trp 115 120

<210> 3578

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3578

Met Leu His Gly Leu Gly Pro Val Pro Pro Pro Leu Trp Ala Ala Val
1 5 10 15

Ser Ala Ser Arg Trp Gly Gly Gly Pro Gln Pro Leu Pro Gln Val 20 25 30

Ser Lys Glu Gly Ser Gly Leu Ala Arg Pro Asp Pro Ser Cys Cys Val 35 40 45 Arg Ala Gly Leu Gly Ala Ala Lys Thr Pro Gly Ala Gln Gly Glu Arg Leu Gly Pro Arg Gly Thr Arg Arg Ala Arg Gly Leu Gln Leu Arg Pro Val Gly Gly Gln Ser Arg Arg Glu Ala Ala Pro Ala Cys Ser Gly Pro Gln Pro Cys Arg Pro His Gly Thr Gly Ala Ala Ser Ser Leu Gly Leu Gln Asp Ala Asp <210> 3579 <211> 169 <212> PRT <213> Homo sapiens <400> 3579 Met Leu Gln Ser Glu lle Gln Ala Met Lys Lys Leu Arg His Lys His lle Leu Ala Leu Tyr Ala Val Val Ser Val Gly Asp Pro Val Tyr Ile lle Thr Glu Leu Met Ala Lys Gly Ser Leu Leu Glu Leu Leu Arg Asp Ser Asp Glu Lys Val Leu Pro Val Ser Glu Leu Leu Asp Ile Ala Trp Gln Val Ala Glu Gly Met Cys Tyr Leu Glu Ser Gln Asn Tyr Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly Glu Asn Thr Leu Cys Lys Val Gly Asp Phe Gly Leu Ala Arg Leu 11e Lys Glu Asp Val Tyr Leu Ser His Asp His Asn Ile Pro Tyr Lys Trp Thr Ala Pro Glu Ala

Leu Ser Arg Gly His Tyr Ser Thr Lys Ser Asp Val Trp Ser Phe Gly

11e Leu Leu His Glu Met Phe Ser Arg Gly Gln Val Pro Tyr Pro Gly
145 150 155 160

Thr Val Pro Thr Val Pro Asp Trp Ala
165

<210> 3580

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3580

Met Pro Ile Ala Ala Phe Gly Gln Lys Gln Arg Pro Ser Arg Phe Phe 1 5 10 15

Met Thr Pro Pro Arg Leu His Tyr Thr Pro Pro Leu Gln Ser Pro 11e 20 25 30

Ile Asp Asn Asp Pro Leu Leu Gly Gln Ser Pro Trp Arg Ser Lys 1le
35 40 45

Ser Gly Ser Asp Thr Glu Thr Leu Gly Gly Phe Pro Val Glu Phe Leu 50 55 60

lle Gln Val Thr Arg Leu Ser Lys Ile Leu Met Ile Lys Lys Glu His
65 70 75 80

lle Lys Lys Leu Arg Glu Met Asn Thr Glu Ala Glu Lys Leu Lys Ser 85 90 95

Tyr Ser Met Pro Ile Ser Ile Glu Phe Gln Arg Arg Tyr Ala Thr Ile 100 105 110

Val Leu Glu Leu Glu Gln Leu Asn Lys Asp Leu Asn Lys Val Leu His
115 120 125

Lys Val Gln Gln Tyr Cys Tyr Glu Leu Ala Pro Asp Gln Gly Leu Gln 130 135 140

Gln Glu Ile Val Arg His Ala Asn Ser Ser Thr Gly Gln Pro Cys Val 165 170 175

Glu Asn Glu Asn Leu Thr Asp Leu 11e Ser Arg Leu Thr Ala 11e Leu 180 185 190

 Leu
 Gln
 Lys
 Cys
 Leu
 Ala
 Glu
 Gly
 Gly
 Asp
 Leu
 Asp
 Glu
 Asp
 Glu
 Asp
 Glu
 Asp
 Glu
 Asp
 Asp
 Asp
 Asp
 Asp
 Asp
 Asp
 Ile
 Lys
 Ser
 Thr
 Ile
 Asp

 Ala
 Ser
 Leu
 Thr
 Asp
 Ser
 Leu
 Asp
 Ile
 Lys
 Ser
 Thr
 Ile
 Asp

 Ala
 Ser
 Asp
 Ile
 Ser
 Cys
 Phe
 Gln
 Asp
 Asp
 Val
 Glu
 Ile
 His
 Val
 Ala

 Ala
 Asp
 Asp
 Ile
 Asp
 Asp
 Ile
 <210> 3581

<211> 440

<212> PRT

<213> Homo sapiens

260

<400> 3581

130

Met Ala Glu Asn Asn Glu Asn Ile Ser Lys Asn Val Asp Val Arg Pro Lys Thr Ser Arg Ser Arg Ser Ala Asp Arg Lys Asp Gly Tyr Val Trp 25 Ser Gly Lys Glu Leu Ser Trp Ser Lys Lys Ser Glu Ser Tyr Ser Asp 35 40 45 Ala Glu Thr Val Asn Gly 11e Glu Lys Thr Glu Val Ser Leu Arg Asn 55 Gln Glu Arg Lys His Ser Cys Ser Ser Ile Glu Leu Asp Leu Asp His 70 Ser Cys Gly His Arg Phe Leu Gly Arg Ser Leu Lys Gln Lys Leu Gln 85 90 95 Asp Ala Val Gly Gln Cys Phe Pro Ile Lys Asn Cys Ser Ser Arg His 105 Ser Ser Gly Leu Pro Ser Lys Arg Lys Ile His Ile Ser Glu Leu Met 115 120 125 Leu Asp Lys Cys Pro Phe Pro Pro Arg Ser Asp Leu Ala Phe Arg Trp

140

His	Phe	He	Lys	Arg	His	Thr	Ala	Pro	lle	Asn	Ser	Lys	Ser	Asp	Glu
145					150					155					160
Trp	Val	Ser	Thr	Asp	Leu	Ser	Gln	Thr	Glu	Leu	Arg	Asp	Gly	Gln	Leu
				165					170					175	
Lys	Arg	Arg	Asn	Met	Glu	Glu	Asn	He	Asn	Cys	Phe	Ser	His	Thr	Asn
			180					185					190		
Val	Gln	Pro	Cys	Val	He	Thr	Thr	Asp	Asn	Ala	Leu	Cys	Arg	Glu	Gly
		195					200					205			
Pro	Met	Thr	Gly	Ser	Val	Met	Asn	Leu	Val	Ser	Asn	Asn	Ser-	He	Glu
	210					215					220				
Asp	Ser	Asp	Met	Asp	Ser	Asp	Asp	Glu	He	Leu	Thr	Leu	Cys	Thr	Ser
225					230					235					240
Ser	Arg	Lys	Arg	Asn	Lys	Pro	Lys	Trp	Asp	Leu	Asp	Asp	Glu	He	Leu
				245					250					255	
G1n	Leu	Glu	Thr	Pro	Pro	Lys	Tyr	His	Thr	Gln	lle	Asp	Tyr	Val	His
			260					265					270		
Cys	Leu		Pro	Asp	Leu	Leu	Gln	lle	Asn	Asn	Asn		Cys	Tyr	Trp
		275					280					285			
Gly		Met	Asp	Lys	Tyr		Ala	Glu	Ala	Leu		Glu	Gly	Lys	Pro
	290					295					300				
Glu	Gly	Thr	Phe	Leu		Arg	Asp	Ser	Ala		Glu	Asp	Tyr	Leu	
305					310					315					320
Ser	Val	Ser	Phe		Arg	Tyr	Ser	Arg		Leu	His	Ala	Arg		Glu
	_			325		_			330				_	335	
Gln	Trp	Asn		Asn	Phe	Ser	Phe	Asp	Ala	His	Asp	Pro		Val	Phe
	0	Б	340		m)	0.1		345	0.1		Tr.		350	Б	C
His	Ser		Asp	He	Thr	Gly		Leu	Glu	HIS	lyr		Asp	Pro	Ser
	C	355	DI	DI	C1	D	360		C	TI	D	365	7.1		TI
Ala		Met	Phe	Phe	Glu		Leu	Leu	Ser	Inr		Leu	11e	Arg	ınr
DI.	370	מו	C	1	C1	375	т1.	C	A	Tl	380	11.	C	Α	C
	rro	rne	5er	Leu		nis	116	Cys	Arg		vai	116	Cys	ASI	
385	Th	т	A a.s.	C1	390	A ~	A1.	1	Dana	395	Dana	Can	Can	Mat	400
mr	ınr	ryr	ASP		116	Asp	мла	Leu		116	rro	ser	ser		LŸS
1	Т	1	1	405	т	u÷-	т	1	410	1,	V _C 1	۸	V _C 1	415	Λ
ren	тул	ren		oru	ıyr	nis	туг	Lys	ser	LyS	val	мгу		Leu	nrg
			420					425					430		

Ile Asp Ala Pro Glu Gln Gln Cys
435 440

<210> 3582

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3582

Met Phe Leu Val Thr Asn Ser Ile Trp Pro Asp Phe Lys Val Ser His

1 5 10 15

Pro Ser Phe Cys Gln Leu Gly 11e Cys Val Asn Val Leu 11e Leu Met 20 25 30

Lys Trp Ser Phe Leu Ser Gln Leu Ile Phe Leu Val Ile Asp Ser Ile 35 40 45

Cys Leu Leu Lys Leu Val Thr Ser Phe Cys Leu Leu Asp 11e Tyr
50 55 60

Met Val Cys His Pro Phe Ser Leu Asn Lys Ser Arg Ser Leu Cys Phe 65 70 75 80

Lys Val His Phe Leu Gln Lys Ala Tyr Arg His Phe Phe Ile Leu Ser 85 90 95

Leu Asn Pro Cys Met Arg Asn Ser Val 100 105

<210> 3583

<211> 301

<212> PRT

<213> Homo sapiens

<400> 3583

Met Cys Val Trp Arg Leu lle Leu Asp Ala Val Asp Gly Arg Glu Cys

1 5 10 15

His His Leu Val His Cys Tyr Met Pro Gln Glu lle lle Ala Gln Pro
20 25 30